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# *History of Syphilis:*

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# HISTORY OF SYPHILIS.

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*Was Syphilis known to the Ancients?*—It can scarcely be said that the history of this disease is in a satisfactory state. The same observation might indeed be made with regard to many other affections, but it seems particularly hard to get up any enthusiasm about the origin and extension of syphilis; partly, perhaps, because the story has been so often told; partly, it may be conjectured, because it is disfigured with fables which the most cursory examination leads us to reject, and encumbered with evidence which rather overloads than strengthens the argument, and obscures the subject which it was designed to illustrate. And thus, though successive authors have handled the topic with care and erudition, I have seen reason to think that this part of their works often awakens less interest than any other. Indeed some of the most recent writers show, by their brief notices or utter silence, either that they do not think the matter worth spending time upon, or that they see no ground for giving up long-received opinions, while the great enigma of the single or double nature of syphilis, so far as it is involved in the history of the disease, can scarcely be looked upon as settled to the general satisfaction of readers.

And to speak plainly, the details are so dry, the quotations from old authors so repulsive in their very look, and often so doubtful as to the evidence they afford, that genius has not been able to lend them interest; nor can any expenditure of toil, any amount of polishing, communicate vitality to such a mass. It seems to defy even the ability of such critics as Haeser and Chabaliér, and I believe we might almost as well try to call up the dead men from their graves, and ask them to tell us what they knew about syphilis, as to galvanize these fragments into life and shape. I see therefore no way but to pick out and adapt only what seems to be the best part of the evidence, and for this purpose it will be requisite to apply the pruning-knife so freely, that

possibly enough the reader may think it has been handled with more vigour than discretion. But there is no help. To make a paper on such a subject readable, to make the chain of argument at once manageable and strong, the evidence must be thoroughly sifted, the only question being how far rejection shall go. Besides, what cannot be proved except by means of such encumbrances is not established any better by their aid. That such is practically, if not theoretically, the case, is, I submit, shown by the fact that, notwithstanding the pains taken by a few authors to uphold the antiquity of syphilis, the old belief is still the prevailing one; for if men really entertained even a suspicion that the complaint might be ancient, whence comes this constant repetition of the cry about the great severity of syphilis at its first outbreak in 1494, seeing that by no possibility can both views be right?

I propose to begin by cutting out all reference to Scripture. If the evidence of the hebrew writ could be relied on to turn the scale, I should hold myself quite justified in employing it. But it is not so. There is no reason why syphilis should not have prevailed, as some writers maintain it did, among the old Israelites, but I do not see any chance of getting beyond mere probability, and we want something more than that; the proof must be of a nature to satisfy, not only the historian but the pathologist, and this we cannot expect to find in a work which was clearly never intended to teach men science. For these reasons I feel no hesitation about excluding quotations which, while they bring us no nearer the proposed goal of our inquiries, are calculated to shock feelings which all men should respect.

In the same way I would deal with the everlasting quotation from Herodotus about the disease inflicted upon the Scythians, which no man has yet made out, but which assuredly was not gonorrhœa as has been surmised; for the old historian says,<sup>1</sup> that those who come into the country of the Scythians may see (*ὁρᾶν*) in what manner these people are afflicted, which could only apply to a disease producing visible effects; besides, it is hardly probable that even rude tribes would ascribe gonorrhœa to descent, and the Scythians believed the malady in question to be hereditary. Those writers who have surmised that Herodotus alluded

<sup>1</sup> *Clio*, 105.

to a disgraceful form of effeminacy, the victims of which were in the habit of dressing themselves like women, may very likely be right, but really what Laurent tells us about the greek adjective used by Herodotus to designate the nature of the affection, renders only too probable the conjecture that its meaning is as completely lost as the use of the *kist-vaen* and *cromlech*. I must therefore conclude that to translate *θῆλειαν νόσον*, or any part of the passage, by "a running from the penis," as M. Chaballier has done,<sup>1</sup> is something more than a free interpretation. Along with the narrative given by the great father of history, may be dismissed the allusion in Horace to the disease under which Cleopatra's troop suffered, being simply one of those perplexing uncertainties which are far too vague for the purposes of any writer who aims at being accurate, Juvenal's mention of warts and condylomata, and all similar evidence drawn from the roman essayists and poets.

*The local Disease known to them.*—So far as I can depend upon my own judgment, I should say that the question at the head of this paper must be answered in the affirmative, and that the description given by Celsus,<sup>2</sup> of ulcers on the glans and foreskin, sometimes dry or with little secretion, sometimes phagedænic, &c., indubitably applies to syphilis, and is the first clear and unimpeachable account that we have of the primary disease. To reproduce the description would lead to a diffuseness foreign to the object of this paper, but I quite concur in what Adams, an author not at all likely to indulge in any fanciful surmises about the antiquity of syphilis, says. He points out<sup>3</sup> that we have here every form of primary sore typified except the true hunterian chancre; while the sloughing phagedæna, or nigrities serpens, of the roman surgeon, is the same affection as that described by Abernethy.<sup>4</sup>

We are here then face to face with a fact which can neither be ignored nor explained away. It is true that from this time onwards, for generations, we meet with but few clear traces of

<sup>1</sup> *Thèse pour le Doctorat en Médecine*; 1860, p. 12.

<sup>2</sup> *Liber vi*, Cap. 18, 24-5-6-7.

<sup>3</sup> *Observations on Morbid Poisons*; 1807, p. 242.

<sup>4</sup> *Ibid.*, p. 229.



syphilis, while at last even these seem to be lost in the works of the arabian writers. Such relics as there are may be found carefully detailed in the writings of Haeser, Chaballier, Astruc and others. I content myself with referring to two which will serve the purpose in hand, that of showing the continued occasional notice of primary sore. The first of these is an unmistakable fact mentioned by M. Robert, who says<sup>1</sup> that M. Becquerel describes, from the account given by an antiquary, certain votive tablets found in an old temple near the Seine, which contained sketches of phagedænic ulceration of the genital organs and of buboes, subjects not likely to have suggested themselves to the imagination without there had been a foundation of fact; indeed I cannot conceive anyone thinking of such a thing unless he were familiar with the occurrence. I searched for the original memoir according to the reference given by M. Robert, but could not find it, so that my account is at second hand.

The next is the story about the hermit Ero, or Hero, told by Palladius, bishop of Helenopolis. I have never seen the original, and the versions given of it are at variance. According to Astruc<sup>2</sup> this worthy, who was a glutton and a profligate, caught from an actress a "Carbuncle in the Glans," the result of which was that within a fortnight (corrected farther on<sup>3</sup> to six months) the whole of the genitals mortified and "dropt off," after which the patient became marvellously devout. The other statement I take from Haeser, who says<sup>4</sup> that the disease took six months to effect this destruction, and ended in the death of this exemplary personage. Astruc's mistake in translating anthrax by "carbuncle" is easily corrected by Haeser's version, which renders it by "mortification." But I do not understand syphilis or any other disease destroying the organs, or, to use the coarse phrase in the text, "his private Parts." If this expression be interpreted to mean the penis, I see no objection to it, providing the accuracy of the first date given by Astruc be verified, as this tallies with the accounts in later writers. For instance, Pearson speaks of sphace-

<sup>1</sup> *Nouveau Traité des Maladies Veneriennes*; 1861, p. 4.

<sup>2</sup> *A Treatise of Venereal Diseases*. By John Astruc. London, 1754, p. 15.

<sup>3</sup> *Ibid.*, p. 58.

<sup>4</sup> *Lehrbuch der Geschichte der Medicin*; 1865, B. 2, S. 193.

lation of the whole penis taking place in less than a fortnight, possibly the very form of primary sore for which Avicenna is said to have suggested amputation of the penis, and which was so common in the middle ages; whereas I know of no disease which takes six months to do this mischief. Mr. Lee however mentions<sup>1</sup> a case of slow phagedænic ulceration by which the whole penis was gradually lost, and another where part of the member was thus destroyed.

But though scattered notices of this kind are to be found, more than half the time that has elapsed since the days of Celsus was to roll away before light fairly breaks upon the scene; for it is not till we come to the writers of the thirteenth, fourteenth, and fifteenth centuries, that we meet with evidence to which we can appeal as decisive in support of the position, that primary disease, at any rate, was then known. When, however, the proof does reach us, it is in a form strong enough to convince even those who are indifferent or prejudiced. In various great seats of learning and research, Milan, Bologna, Montpellier, Oxford, we find, from about the year 1270 onwards, a somewhat frequently recurring, and even more precise mention of facts, showing that the attention of thinking men had been drawn to the occurrence of these lesions; and the notice of them, at so many different places and by so many different authors, seems to me decisive proof of their being already widely diffused through western Europe, while of their identity with many of the sores in the present day I fancy there can be little doubt. For nearly two centuries and a quarter before the great outbreak of syphilis, we may notice reiterated mention of such symptoms as bubo, "imposthume of the groin," "ulcers of the yard," "ulcers from pustules of the yard," "mortification of the substance of the yard," all attributed to "lying with a foul woman," "a foul, nasty or cancrous woman," a "woman having an ulcer of the womb," and so on. We may read a description in at least one author, of sores piercing between the skin and flesh of the virile member, the very feature which Judd<sup>2</sup> gives as characteristic of the "black lion" "burrowing under the foreskin

<sup>1</sup> '*Lectures on Syphilis*;' 1875, p. 148.

<sup>2</sup> *A Practical Treatise on Urethritis and Syphilis*; 1836, p. 197.

and dissecting between the integument and the body of the penis."

The credit of having honestly and lucidly attempted to show that syphilis is not the modern disease it was long supposed to be, must I believe be apportioned to Beckett,<sup>1</sup> one of those bold and original thinkers who leave the impress of their minds on the task they take in hand. After consulting "a great Number of ancient Physical and Chyrurgical Books," he concluded for the antiquity of the disease, and he laid the foundation for the change of opinion which he wished to effect; for though he weakened his argument by incorporating, after the theory of his day, gonorrhœa, the "Sycknesse of Brenning," with syphilis, and deciding rather hastily leprosy to be the latter disease, and though he was afterwards overshadowed by the monstrous erudition and ponderous arguments of Astruc, yet his time came, and perhaps he, more than any other man, contributed to establish the antiquity of at least two of the diseases then known as syphilis. Now Beckett tells us that John of Gaunt died in 1399 of phagedæna of the genital organs, and that, on Richard the Second paying him a visit, "time-honoured Lancaster" who by the way seems to have been a person of decidedly loose morals, "magnus enim fornicator fuit" being the character given him, favoured his majesty with a display of the ravages which the disease had made. Such at least is the story as given by Master Thomas Gascoyne, then Chancellor of Oxford, who also mentions that several persons of distinction in that time suffered in the same way. To this may be added the statement of Simon<sup>2</sup> that in 1414 King Ladislaus died at Naples of phagedæna.

True phagedæna rarely if ever kills, and therefore the disease spoken of, supposing it to have been really the direct cause of death, was most probably sloughing sore. The universal debauchery, which prevailed during the middle ages in some parts of western Europe, has been suggested as the reason why this phagedæna, or sloughing, was so frequent; but it is doubtful

<sup>1</sup> *An attempt to prove the Antiquity of the Venereal Disease long before the Discovery of the West Indies, &c.* By William Beckett, Surgeon. *Philosophical Transactions*; 1718, p. 839.

<sup>2</sup> *Ricord's Lehre von der Syphilis*; 1851, S. 7.



whether such dissoluteness was the rule in England at that time, though the habits of both sexes were uncleanly and unhealthy enough, and though drunkenness and gluttony were to be seen on every side. Haeser thinks<sup>1</sup> it feasible that phagedæna (sloughing) was prevalent in antiquity, and that this interfered with the development of secondary disease, which may also have been the case in the fourteenth and fifteenth centuries.

What then does all this mean except that the complaints so described were primary sores? Waiving the question of unity or duality, it may be safely asked, to what other disease than syphilis are we to ascribe hard, almost dry, sores, phagedæna, and buboes? If we can here and there explain away an individual symptom, can we honestly adopt this process with regard to the aggregate? For my own part I know of no malady to which such symptoms can, on any plausible grounds, be referred, except the one which has always given rise to them, namely syphilis itself. It is certain that, in the thirteenth, fourteenth and early part of the fifteenth century, when men were insensibly paving the way for such momentous struggles with the pedantry of the schools, and had begun to think for themselves, several authors reasoned correctly enough as to the origin of these sores from what is after all the great source of syphilitic contagion, namely connexion with unclean persons; and I need scarcely say that a patient, who would nowadays plead an innocent origin for the sores described by Bernard Gordon or John Gaddesden, the "*puncturæ inter carnem et corium*," would find his story received with great want of faith.

I consider then, as just pointed out, the wide-spread existence of such sores as irrefragable proof of the prevalence of local syphilis itself, for, in direct opposition to the opinions of some eminent authorities, I look upon ulceration of the genital organs, *from any cause but suspicious intercourse*, as very rare. Richard Carmichael says<sup>2</sup> "the very organization, secretions and functions of the genitals dispose them to ulceration, beyond all other parts of the body." My experience is the reverse, and I consider it strange that, if Carmichael be right, I should, in so many cases of

<sup>1</sup> *Op. citat.*, Vol. 2, p. 186.

<sup>2</sup> *An Essay on Venereal Diseases*; 1825, p. 19.

venereal and supposed venereal disease, about which I have been consulted, and in the great number of patients suffering from diseases of the skin treated by myself at St. John's Hospital, have very rarely met with spontaneous ulceration of the genitals, though constantly on the watch for such morbid appearances. Herpes, eczema and lepra often assail the penis and scrotum, and may end in superficial excoriation; scabies, too, will, as is generally known, set up pretty large pustules on the penis, but I know of nothing which supports Carmichael's assertion.

We are then, I contend, warranted in looking upon it as proven, that, long before the outbreak of syphilis in 1494, *primary symptoms existed which can be traced back to no other disease than the venereal*; for it may save some confusion if I say at once, that I do not, and never did, consider secondary symptoms as the exclusive fruit of the hard sore, using the term in its strict sense. On the contrary, I have reason to think that infecting sore, in some rare instances, while yet quite distinct from chancroid, does not pass through the phase of hardness; and that on the other hand in some instances, also very rare, certain slight and obscure symptoms, of slow and incomplete evolution, follow sores, the history and look of which do not in any satisfactory way distinguish them from chancroid, which is yet, however, so far as such evidence can be supposed to carry weight, to be looked upon as a self-existent variety of syphilis. Again it is certain that *in our day, and ever since syphilis was first understood*, some of the primary symptoms, mentioned by the authors I have previously spoken of, *have always been and still are, in a certain proportion of cases, followed by secondary disease*. Adams reports<sup>1</sup> a case of secondary and tertiary affections succeeding exactly the phagedæna described by Celsus, and he who has seen much of syphilis has seen the same thing.

*Absence of constitutional Syphilis.*—But there is no proof of systemic infection having, in these early times, ever followed such lesions; everything goes to show, either that the sores of the two forms of syphilis, alike in the era of Celsus, or Gordon or Hunter, sometimes approach each other so closely as to baffle and perplex the best observers; or that sores, now followed by

<sup>1</sup> *Op. citat.*, p. 32.

constitutional disease, did not, at one period of historic medicine, entail this penalty. Till we come to the incomplete case mentioned in the consultations of Hugo Bencius, we find no description which can really pass for a faithful portrait of lues. Utter silence about constitutional syphilis taken as a whole, absence of all reliable account of it taken as a sequence and group of symptoms, meet us, turn where we will. We hear indeed, long before the invasion of Italy by the French, of two diseases which some authors have unhesitatingly pronounced to be syphilis, but which I feel compelled to reject with equal want of hesitation.

The first of these is the form of leprosy said to have been communicated by contact. The opinion that this was constitutional syphilis, unrecognized and mistaken, has been supported by an array of historical testimony for which I cannot find space, but as the question is one of considerable importance, it can be better taken when that of the recognition of syphilis as the leprosy of the ancient writers comes under review. For the present it will, I think, suffice to say, that all the most reliable evidence is in favour of the view, that the disease thus confounded with syphilis was simply elephantiasis Græcorum, and that the idea of its being contagious rested on a mistake. My own experience, certainly, quite supports the theory of non-contagion; and I do not see how any one can duly weigh such testimony as that detailed by Bateman,<sup>1</sup> that in the report of the London College of Physicians on leprosy, and the facts related by Dr. Gavin Milroy,<sup>2</sup> without coming to the conclusion, that this disease is rarely if ever transmitted even by so potent a means of communication as sexual intercourse. Yet in the face of all this evidence we are told,<sup>3</sup> that the belief in the contagious nature of leprosy, so strongly implanted in the minds of the laity, is shared by some members of the medical profession. An error, then, prevalent in our day, is conceivable enough in times so far removed.

The other disease was the malmorto, an affection which in some of its features resembled constitutional syphilis as much as

<sup>1</sup> *Practical Synopsis of Cutaneous Diseases*; 1819, p. 304.

<sup>2</sup> *Report on Leprosy and Yaws in the West Indies*; 1873.

<sup>3</sup> *Pathology and Treatment of Diseases of the Skin*. By J. L. Milton; 1872, p. 288.

leprosy does, and which was frequently accompanied by buboes. According to Simon<sup>1</sup> one symptom was a growth of rupial crusts, the description of which corresponds with that of the eruptions seen in persons labouring under syphilis, after the retreat of the French from Italy; and which de Vigo, who remarks<sup>2</sup> upon the close resemblance of this disease to the syphilis of this day, having the same signs and causes as the "frenche pockes," describes<sup>3</sup> as "a maligne, filthy, and corrupte scabbe," breaking out on the arms, legs and thighs, the complaint being acquired by contagion sometimes derived from a leprous woman, and when confirmed only admitting of a "cure palliative." This disease was cured, we are told,<sup>4</sup> with mercury pushed to the extent of salivation; a practice adopted, not merely by rude charlatans, but by some of the most eminent physicians in the middle ages, such as Theodoric and Arnald of Villanova. What malmorto really was I confess my entire inability to decide. It may have been, as some authors have thought, inveterate scabies, but I think there can be little if any doubt that it was neither true leprosy, which is not curable by the use of any preparation of mercury, nor syphilis, for there is no account anywhere of the antecedent symptoms proper to this disease.

Again it may be observed, without referring the reader here on every occasion to authors and dates, that a good deal of scattered evidence has been collected, showing that at one time or other, ages before the great outbreak of syphilis, people suffered from affections which we should look at very suspiciously if met with among young men of the present day. Among these are condylomata, fungous growths on the genitals connected with disease of these parts, rhagades, ulcerations of the mouth, destructive ulcerations of the velum and palate, as also of the nose, and nodes known in the old english tongue as boonhaw,<sup>5</sup> swelling of the bone, not improbably the vitium of Celsus.<sup>6</sup> I

<sup>1</sup> *Op. citat.*, p. 9.

<sup>2</sup> *The most excellent Workes of Chirurgerye . . .* by maister John Vigon; 1543, Fol. clxiii.

<sup>3</sup> *Ibid.*

<sup>4</sup> Simon; *Op. citat.*, p. 9.

<sup>5</sup> Beckett; *Philosophical Transactions*; 1720, p. 52.

<sup>6</sup> Adams; *Op. citat.*, p. 40.



suppose it is quite superfluous to say of each of these symptoms, that we might safely refer it to syphilis, *provided there was a history of syphilitic affection to connect it with*, or some other, even solitary, sign of venereal taint, but this is precisely what is always wanting. At one time I felt inclined to refer all such tokens to venereal disease, but the more I searched into the matter, the more satisfied did I become, that the basis of a strict induction was in every case faulty; and that some of the symptoms mentioned, such as condylomata, might with equal confidence be ascribed to the transformation of soft primary sore, and others, *e.g.*, the affections of the nose, mouth and velum, might be due to leprosy, while of the nodes I can offer no explanation.

It seems a lame conclusion to arrive at, when an author is driven to admit that he must leave the case exactly as he found it, but I see no alternative except to do so; and when the materials for thoroughly solving a question are wanting, the cause of true knowledge is best served by confessing our inability to decide it. Here we see, arrayed on one hand, primary symptoms, some of which are now in a certain per-centage of cases inevitably succeeded by constitutional disease, existing for ages without our being able in a single instance to follow them up to their natural results; and on the other hand, constitutional symptoms which one might think could scarcely have always been of innocent origin, which we are equally unable to trace back to a primary lesion. Such being the case, I feel that I ought to remit to other hands the solution of an enigma which quite puzzles me.

*First Traces of true Syphilis.*—As we approach the era of the so-called siege of Naples, we come upon evidence of a more precise kind, and which, however faint and dim may be the first feeble impress it stamps upon pathology, gradually acquires, with the lapse of time, a force and completeness which, in my opinion, leave us no alternative but to admit, that *the earliest appearance of true syphilis in Europe must henceforth be materially ante-dated*. The famous traveller, Dr. Clarke, in his account<sup>1</sup> of a manuscript in the library at Stockholm, by Johannes Arderum de Sleewarck, which must have been written rather early in the fifteenth century, inasmuch as it is the work of a man who practised at Neewarck

<sup>1</sup> *Travels*. By E. D. Clarke; 1824, Vol. xi, p. 139.



from 1412 to 1419, says "It is very curious to observe (in this manuscript), 'Pro morbo qui dicitur . . .,' followed by the French name of a disease, which is supposed not to have been known before in Europe before the discovery of America." Very curious indeed, for if this be not a later interpolation, there is an end to all doubt about the origin of syphilis having taken place much earlier than is generally supposed; it being, I imagine, certain that morbus gallicus or some equivalent is meant here, and that such a term was at the outset only applied to true syphilis.

But there are grounds for believing that it is not a later interpolation. Haeser gives evidence in support of the theory that morbus gallicus is derived, not from the classic name for France, but from the vulgar word galle (gâle, itch, a disease which has on numerous occasions been mixed up with syphilis), the morbus gallicus having been at one time in France called galle (gâle), used in England as far back as the fourteenth century to designate a running sore. He adds<sup>1</sup> that the term Mala Franzos was known in Germany as early as 1472, an official record showing that in that year a choir singer of Mayence was relieved from his duties because he was suffering from that complaint. Dr. Hermann Friedberg rejects<sup>2</sup> Haeser's conclusions, on the ground that the german authors called the disease gallicus, not for any such reason, but distinctly because they thought it came from the French; but though this gentleman has treated the subject in a masterly way, I still think he fails to refute Haeser's opinion. Of one thing however we may feel pretty well assured, which is that the old myth about the name dating from the french invasion of Italy can be given up.

The next piece of evidence that we come to is the consultation of Hugo Bencius, who died in 1448, and which may therefore be even earlier than the notice of venereal disease mentioned by Clarke. It is taken from Astruc,<sup>3</sup> who treats with derision the idea that the disease could have been syphilis, in which Haeser seems to concur, and it must be admitted that the picture

<sup>1</sup> *Op. citat.*, Vol. 2, p. 223.

<sup>2</sup> *Virchow's Archiv.*, B. 33, S. 291.

<sup>3</sup> *Op. citat.*, p. 46.

is not so clear as one could wish. Astruc gives a long list of symptoms, the diagnosis and classification of which might puzzle the whole faculty and stands open to accept any verdict but that of their being syphilis. Among the symptoms we find pain in the head lasting "a Month and a Half;" pimples about the scapula, the size of peas or filberts; "a hard Tumour on the back Part of his Legs;" feverish fits; eruption of red spots, somewhat rough, from neck to hips; night pains; tumour on right leg which ulcerated and was followed by red, rough, scaly spots and boils on different parts of the body. I suppose the proper decision to come to here is that we cannot say with certainty what the disease was, but that some of the symptoms remind one very strongly of syphilitic pains, lepra, gum knot and possibly impetigo rodens. As concerns merely my own diagnosis, I should be disposed to say at once, that I know of no disease except syphilis to which such symptoms can be ascribed.

Again, as Friedberg points out,<sup>1</sup> a pestilence is spoken of in the *Annales Danicæ* of Peter Olaus for 1483, as raging in Denmark, and is called the *morbus gallicus*. Pinctor says the disease began in this year. Hensler, indeed, translates with some hesitation the passage which he quotes to this effect, but I do not see how it can be rendered otherwise.<sup>2</sup> But as the reader will see, Pinctor arrives at this conclusion, not on any historical data, but because he was one of those, out of whom fire could not melt the conviction that syphilis owed its origin to sidereal changes, and these took place in 1483. M. Auspitz makes him say that it began at Rome in that year, but the word Rome does not, so far as I can find out, occur in Pinctor's account of the origin of this disease, and he did not go there till ten years after, so that he might, inasmuch as the text is concerned, be referring to its beginnings in Valencia, to which view Hensler clearly inclines.<sup>3</sup> The real difficulty, however, with regard not only to Pinctor but

<sup>1</sup> *Virchow's Archiv.*, B. 33, S. 287.

<sup>2</sup> "Hic morbus cepit exordium anno 1483, quid eo a. de M. Octobr. fuerunt 4 planetæ, videlicet Jupiter, Mars, Sol et Mercurius in libra in domo ægritudinis . . . ipsum morbum durasse per annos xxvii (xvii) numerando a principio morbi scil. ab. a. 1483."

<sup>3</sup> *Ueber den westindischen Ursprung der Lustseuche*; 1789, S. 92; *Geschichte der Lustseuche*; 1783, S. 112.

to many writers of that day, is that we cannot always feel sure whether they refer to syphilis or some of the numerous epidemics which then prevailed.

Peter Martyr, as is well known, in a letter to the great portuguese scholar, Arias Barbosa, dated April 5th, 1488, the year given by Delgado for the appearance of syphilis at Rapallo near Genoa, mentions the disease as existing in Spain, in the most unequivocal terms, and calls it morbus gallicus. The correctness of the date has been disputed, partly on the ground that the letter was addressed to the greek professor at Salamanca at a time when no such professorship was in existence, by Thiené,<sup>1</sup> who however wrote in an age when men believed as firmly in Astruc's sophistical reasoning as they did in the circulation of the blood; but so far as I can judge Mr. Prescott has quite disposed<sup>2</sup> of the objection. Haeser considers the date to be of undoubted accuracy, while Friedberg taxes Thiené with not having understood the Latin which he relies on, and having translated as "university professor" what might clearly apply to any teacher. Lastly we are informed, that some of those who saw the disease in 1494 and 1495 were already acquainted with it. Thus Hensler quotes,<sup>3</sup> and with very natural surprize, the account of Schellig (1494 or 1495), which does not contain a word about the disease being new, but quite the contrary; whilst Schellig's editor, Wimpfeling, (1494-95) distinctly says it was not new. Farther on<sup>4</sup> Hensler cites from Salicetus a passage showing that syphilis existed as early as 1457, which date he thinks might very well mean 1475, because at that time men frequently wrote the numbers as they spoke them. Of the authors who speak of this disease having appeared so early as 1492 and 1493 at Rome and elsewhere, it will not be necessary to give any particular account, as their dates are entirely forestalled by those already mentioned.

On the other hand Alexander Benedict, a venetian physician (1495), Leonicens, "Professor of Physic" (1497), Conrad

<sup>1</sup> *History of Ferdinand and Isabella.* By William H. Prescott; 1851, Vol. 2, p. 202.

<sup>2</sup> *Ibid.*, p. 203.

<sup>3</sup> *Geschichte der Iustseuche*; S. 9.

<sup>4</sup> *Ibid.*, p. 13.

Gilinus, "Doctor of Arts and Physic" (1497), Bartholomew Montagnana the younger, "Professor of Physic" (1497), Caspar Torella, physician (1497), Wendelin Hock, "Professor of Arts and Physic" (1502), and Anthony Benivenius (1507), are quoted by Astruc as considering the disease to be new.<sup>1</sup> Hensler flatly denies this of Leonicensus, and the proofs he cites<sup>2</sup> seem quite convincing. Taking, then, those who remain, we must pronounce their testimony inadequate to overthrow that on the other side. No doubt the disease was new to them, but this only shows that it had not reached that part of the world where they were residing. Syphilis is spoken of by Martyr, Delgado and Fulgosi as appearing in Spain in 1488, Rapallo 1488, and Rome 1493. Of the six authors quoted by Astruc two if not three, Benedict, Montagnana, Hock, were in Venice and Padua, and one, Beniveni, in Florence, parts only invaded apparently much later by syphilis; one, Torella, was a wanderer who wrote his account at Blois, and spoke of syphilis as beginning in Auvergne in 1493, and being in reality known to the ancients;<sup>3</sup> and of the other, Gilinus, nothing is known, but as he dedicated his work to the duke of Esté, he too most probably lived at some distance from the first foci of the disorder. The ignorance of these authors about the earlier appearance of the disease expressly refers to its outbreak in 1495, and in this they were manifestly at fault. The evidence that it broke out sooner is, taken as a whole, too strong for any rebutting testimony. Exception might be made to parts, but looking to the aggregate, I consider we may pronounce the existence of syphilis in Spain and Italy long before 1494, to be as well established as any fact in history, and Hensler says<sup>4</sup> the evidence of syphilis being prevalent in Upper Italy and Rome in 1492 and 1493 is incontestable. At the same time I think such evidence as that adduced from Salicetus is to be received with great caution. Obviously enough he may have been right, or memory at so long an interval may have played him false; we have no means now of deciding such a point. It is a question of veracity and ac-

<sup>1</sup> *Op. cit.*, p. 32. I have corrected the dates from Hensler.

<sup>2</sup> *Geschichte der Lustseuche*; S. 43.

<sup>3</sup> *Ibid.*, S. 35.

<sup>4</sup> *Ueber den westindischen Ursprung der Lustseuche*; S. 16.



curate observation ; one of those matters in which we implicitly trust one man and hear another in silent doubt, and therefore till much stronger proof is brought forward I should vote for rejecting the story.

Vella saw the disease both before and after the outbreak of the morbus gallicus, and expresses his surprize at finding it, from that date, followed by secondary symptoms, the initial lesions appearing to him identical. M. Bassereau maintains<sup>1</sup> that this is an error, and that the exact similarity spoken of by Vella never existed, the best physicians of that day having pointedly noticed the hardness and different tint in the new form of chancre. This objection is a little tinctured with extreme dualism. No doubt Vella was wrong ; he might have discriminated better between typical hard infecting sore and chancroid ; but he was only wrong in this much, that he converted an occasional resemblance into a rule. Everyone, familiar with syphilis, knows that the first of these lesions will almost inevitably be followed by secondary disease ; but he knows quite as well that cases constantly meet us, where we cannot say, either from the look of the sore or the results of inoculation, whether this consequence will follow or not. Some of the best surgeons, including M. Ricord himself, have not shrunk from confessing that they could not always decide upon the nature of a sore from its visible signs. It is therefore easy to understand how Vella fell into such a mistake, and indeed it would be rather surprizing if any person in his day, who saw much of syphilis, had always avoided an error which is now by no means infrequent. I hope however to show that Vella unconsciously helps, not only to establish a most important truth, *the duality of syphilis as a historical fact*, but to explain the confusion about primary sores which has arisen from confounding similarity with identity.

*Syphilis recognized as the Leprosy of the Ancients.*—We are told<sup>2</sup> that some of the physicians, who at the close of the fifteenth century saw syphilis for the first time, so far from looking upon it as a malady hitherto unknown, thought it was a return of the ancient leprosy, with the symptoms of which, those of them who

<sup>1</sup> *Traité des Affections de la Peau* ; 1852, p. 239.

<sup>2</sup> Simon ; *Op. citat.*, p. 4.



had read the works of the arabian writers were quite familiar. The author, from whom I quote, adds, that the names under which they recognized this leprosy were bothor, saphati and formica, which were clearly thought to be individual maladies, forms of leprosy; but the fact is that there never were such diseases. They belong to the "inane Spectralities and Cinder-heaps, presided over by Dryasdust and Human Stupor;" and those who endeavoured to trace syphilis back to such turbid sources, attempted a task impossible of execution, and of which they were perpetually losing the clue.

Bothor is defined by Kraus as meaning little bladders and pustules, such for instance as aphthæ in the mouth, acne spots and small-pox pustules, a meaning which is at any rate comprehensive enough; according to some authors it includes eczema. Of this strange malady saphati was, according to de Vigo, a species. Saphati itself, following the account given by Fournier,<sup>1</sup> was a papulo-squamous affection, as much like syphilis as anything else, but very difficult if not impossible to identify; indeed his researches satisfied this careful observer, that most probably several different affections were confounded together under this name;<sup>2</sup> while Hensler, who enjoyed extraordinary facilities for examining old authors, considers<sup>3</sup> saphati to be the same thing as the purulent scalled head of his day, which was most likely inveterate eczema or some form of tinea, complaints having no analogy whatever with any papulo-squamous eruption. Hensler's definition is still farther expanded, and the confusion thereby increased, in his work on leprosy. From the picture drawn of it by John de Vigo, this disorder appears to have been more like acne rosacea, which disease however was also known to him. "Saphati," he says,<sup>4</sup> "are little pustles whiche are engendred in the foreheed, in the neck and in the face, and cheefly about the nose, and are fleshye with a lytle crust upon them lyke the skale of a fysh," which "appeareth also in the Frenche pockes." System, standing on the undisputed basis of the four humours, required that there should be four kinds of saphati and four were found, the third in the series being

<sup>1</sup> *Jean de Vigo*. Par le docteur Alfred Fournier; 1870, p. 80.

<sup>2</sup> *Ibid.*, p. 128.

<sup>3</sup> *Geschichte der Lustseuche*; S. 21.

<sup>4</sup> *Workes of Chirurgerye*; Fol. cxxxi.

an eruption of papules of a very peculiar nature, for they were not accompanied by either itching, inflammatory redness or moisture.<sup>1</sup>

Lastly formica appears to have been more akin to lupus than to anything with which I am acquainted, a fact possessing a certain degree of interest when connected with Swediaur's account of syphilis in Canada. De Vigo however describes<sup>2</sup> formica as a "lytle pustle or many pustles that come upon the skynne," and tacitly assents to Avicenna's view, that "every Aposteme walkynge in the skynne, not having brodeness is a Formica." In other words both these writers considered it to be an illness which corresponds to our impetigo. To these three complicated disorders Haeser, who discusses the question carefully, adds<sup>3</sup> aluhumata and thymius of which I will not trouble the reader with any account. It appears unnecessary to multiply this kind of evidence. Carrying it farther would simply add to the bulk without increasing the value, and I certainly think enough has been said to show the utterly unreliable nature of such recognitions.

The cause of much of these erroneous views lay in the idea which prevailed about the excessively complicated nature of leprosy itself; for the literature of this disease was, at the close of the fifteenth century, in a state of the most hopeless confusion, which had begun with the first mention of the disease by those, to whom for so many ages men had turned for information, and had gained strength and extent with years. As Dr. Adams puts the case, the Greeks knew nothing of the arabian leprosy, spargosis; the Latins were equally ignorant of this and (knew almost as little of) leprosy; while the Arabians called spargosis by the name of elephantiasis, and elephantiasis græcorum by that of leprosy. Nor could the latter even agree among themselves as to names; for while Rhazes, the oldest of these writers except Serapion, calls leprosy, lepra, Haly Abbas, according to Hillary,<sup>4</sup> terms it elephantia, and Avicenna gives it both these names. To make the state of matters still more bewildering, we are told, what we can very well believe, that the account was farther complicated by the

<sup>1</sup> Hensler; *Vom abendlaendischen Aussatze*; S. 74.

<sup>2</sup> *Workes of Chirurgerye*; Fol. xxi.

<sup>3</sup> *Op. citat.*, Vol. 2, p. 242.

<sup>4</sup> *Observations on the Changes in the Air, &c.*; 1759, p. 323.

errors of transcribers. Round this promising nucleus of perplexity there had gradually gathered a cumulus of theories, systems, and definitions ; every author having for ages added something to the confusion, till at last leprosy, complicated even in the days of Moses, had become a perfect nightmare, and such it remained till Adams separated lepra from it, and Bateman, confessedly unable to see his way out of the maze in which the two forms of elephantiasis were entangled, called in the aid of Mason Good, whose wonderful learning and acumen enabled him to separate, for the first time, the compound into its component parts.<sup>1</sup>

In the works of the earlier greek and latin writers, and in those of the arabian and later greek writers, we can recognize several of the skin diseases now seen daily in our hospitals, and an almost unbroken line of medical writers had continued the knowledge of these down to the end of the fifteenth century, re-describing them often with a considerable degree of fulness and accuracy. Some, it is true are not very clearly defined, but yet so far separated from all other cutaneous affections that we may feel pretty certain of their individuality. Of these no less than sixteen—twelve belonging to the clearly recognized, and four about which we can only say that there is no other disease to refer them to—were reckoned as species of leprosy, produced by the leprosy virus, and capable of being converted into this disease. These affections were first of all leprosy itself, early distinguished as tubercular leprosy ; lepra (psoriasis) and leucoderma, which are so constantly called leprosy that it is often not easy to make out which disease some particular author is speaking of ; and elephantiasis, which is treated as being indisputably a local form of tubercular leprosy, the poison having shown itself upon the leg or the scrotum instead of diffusing itself through the whole frame. After these come white and red pityriasis, about the leprous nature of which no doubt was entertained ; alopecia and sycosis, almost equally well established ; impetigo and erythema ; kerion and tinea versicolor, not so widely recognized, but still never rejected so far as I am aware. These are followed by the four less certain forms, namely vitiligo (morphea or morphea alba) acne rosacea, tinea circinata which may however have been

<sup>1</sup> *The Study of Medicine* ; 1829, Vol. 5, p. 590.

ring-lepra, and scabies which seems to have been "the itching leprosy." Again these components themselves were often, apparently for no other reason than because they were supposed to constitute so many divisions and subdivisions of leprosy, arbitrarily ranked with other diseases in a most embarrassing way. Thus lepra was classed with leucoderma to form a genus, which was divided into species, while the group of affections constituting morphea nigra seems to have included inveterate ichthyosis. Amidst all this confusion tubercular leprosy seems to have always been looked upon as the type and parent disease, and when Beniveni and de Vigo speak of leprosy being no longer known, it is clearly to this form that they refer.

It is therefore not at all surprising that the medical men, at the close of the fifteenth century, took up rather a misty idea of such a multiform complaint, and that the greatest conflict of opinion prevailed among those, who thought they recognized in syphilis the leprosy which had scourged so many nations and so many ages. Sebastian of Aquila considered the new disease to be leprosy; Widman ranked it with saphati, with this addition however that it at the outset resembled formica, an exactly similar opinion being, as I understand Hensler, held by Montesauro, while Leonicensus stoutly maintained that syphilis had never before been described as any form of leprosy, an opinion also upheld by Cataneus and others<sup>1</sup>, and in which I concur so far as the idea of anything like a full description is concerned.

If it be asked how it came to pass, that men ever traced syphilis back to a monstrosity like the picture of leprosy, which had been expanded till it embraced the fundamental lesions of at least five-sixths of all cases of skin diseases, why they failed to see how unreal the old account was, I reply that most likely several causes operated. The writers of that day were fond of tracing affinities between diseases, and sometimes carried this to such a pitch as to connect maladies, which required an immense amount of faith and a vigorous effort of the imagination to bring them into relationship. Thus de Vigo went so far as to fancy that he had discovered in syphilis the malady under which the emperor Augustus suffered. This has been spoken of as, and no

<sup>1</sup> Hensler; *Vom abendlaendischen Aussatze*; S. 229.



doubt is, an extraordinary mistake for so able an observer, seeing that there is no resemblance between the two affections; but it is quite matched by the discovery that *tinea decalvans* and *tinea versicolor* are forms of leprosy, as was maintained by a writer of great eminence at the close of last century.

But respect for authority evidently played the chief part; of this I apprehend there can be little doubt. The men, with whom Leoniceus had to contend, feared to trust the evidence of their own senses, and to assume that they had met with a disease unknown to Hippocrates and Galen, to Rhazes and Avicenna. Even the pathology of a disease was incomplete unless it could be divided into four species corresponding to the four humours of Galen, and remained so long after Paracelsus openly burned his works at Basle, foretelling that the author and Avicenna would one day be served after the same fashion.<sup>1</sup> No doubt this was ridiculous subservience on their part, but such deference to authority continued through ages which claimed to be enlightened, and is anything but extinct at the present day. We find Bateman taxing<sup>2</sup> Dr. Hillary, who had seen leprosy in Barbadoes, with describing the complaint, not as he found it more than two centuries and a half after Charles the Eighth's entrance into Naples, but as he had read of it in Aretæus, and indeed some of Hillary's statements, such as those about the curability of leprosy in its early stages, are far more in accord with tradition than fact; while some of the most important features in the pathology of the fifteenth century are still religiously preserved and taught in our classics of medicine. Our present division of temperaments, with their visionary bias to certain diseases and to be influenced by certain remedies, our scrupulous dread of repulsion of disease, and the tendency to refer all inveteracy to scrofula, gout or syphilis, are but far off reflections of what was so long taught about the galenic humours and leprosy. The theory, so clearly propounded by that excellent observer, Cataneus, about the mischief done by cauterizing syphilitic sores and thus driving the poison into the system, is hardly cold in its grave.

It seems strange that those, who were seeking for the prototype

<sup>1</sup> "Sic vos ardebitis in Gehennâ."

<sup>2</sup> *Op. citat.*, p. 303.



of syphilis in the leprosy of the dark ages, never thought of comparing the new disease with leprosy itself, and the explanation offered of their neglecting so practical a test is more startling than the fact itself; for we are told that it was because the leper had disappeared, had become a thing of history. I have already mentioned that Beniveni and de Vigo speak of true tubercular leprosy as a disease almost entirely unknown at that time, and all the evidence to the contrary is slight and of uncertain value. Astruc, an author whom I always cite with reluctance, says<sup>1</sup> that the lepers refused to associate with the venereal, but the author he quotes from wrote forty years after the outbreak of syphilis, and the lepers of the time he speaks of were chiefly sturdy beggars, with itch or some other skin disease, on the strength of which they claimed the charity of the leper house. But it is going too far to assert, as a modern author has done,<sup>2</sup> that there were no lepers at all. Beniveni saw a case, and only says that it was very rarely seen in Italy. It still lingered in some parts of Germany, though very occasionally met with; and it either prevailed in districts quite near to the principal arenas in which syphilis first showed itself, that is to say certain maritime and rural districts in Italy, Spain and France, or it only passed away from these parts to return and infest them again, as the evidence of leprosy existing there at a later date seems quite reliable.

And though it was fading away from cities and towns, though its haunts might be out of the way of the followers of medicine, men could not have forgotten what leprosy was. If the leper were not to be seen in the streets, if the priest no longer read the funeral service over him while living, and the law no longer disinherited him and severed him from the rest of the human race, he was yet too near the time for the memory of his disease to have passed away, and indeed Hensler professedly<sup>3</sup> drew his materials from those writers who, between the twelfth and the end of the fifteenth century, had themselves seen and described the disease. Besides at that time even popular opinion was hardly likely to be

<sup>1</sup> *Op. citat.*, p. 10.

<sup>2</sup> "Il est très-clair que les médecins de cette époque n'avaient point vu de lépreux;" *Traité théorique et pratique de la Syphilis*. Par Armand Després; 1873, p. 72.

<sup>3</sup> *Vom abendlandischen Aussatze*; S. 2.

much at fault, so long as ever a case was here and there to be found. The rudest people have always been able to recognize genuine leprosy, the dreaded and detested first-born son of death ; ignorant of refinements in diagnosis, they seize at once upon those features which have made it a subject of horror in every age and to every race of men. They might confound other diseases with it, but I should think that leprosy, *differently from syphilis*, was never yet taken for anything else. A man, who has read a description of it years before, will recognize it at the first glance, and once seen it is never forgotten. For such reasons I must conclude that tubercular leprosy, which does not seem to have changed in a single feature or quality since it was described, was too well known to the physicians of Charles the Eighth's day to permit of their recognizing syphilis in it. Such a mistake could only have been made by a very inexperienced writer, who had neither seen nor heard much, though it is conceivable enough of the concurrence of symptoms which made up the classic picture of leprosy.

To those who urge that it is now mere waste of time to confute such errors, that they have died out or will die out of themselves, I reply that it is not so ; that they cannot be trusted to execute the happy despatch, and that we must perform that sad office for them. So recently as 1863, an author, who has not I believe withdrawn a word of what he then said, and whose name secures an enthusiastic reception for any opinion he may choose to express, M. Ricord, remarking upon the possible connexion between leprosy and syphilis, stated his belief in the existence of an ancient leprosy distinct from that known to us. In order that I may not be supposed to have in any way misrepresented his meaning, I give M. Ricord's exact words : " La lèpre des Grecs ou des Arabes que nous connaissons aujourd'hui, est elle semblable à cette lèpre antique ? Nullement, car la lèpre d'alors était souvent contagieuse, elle se communiquait par les rapports sexuels. Evidemment ce n'est par notre lèpre actuelle."<sup>1</sup> No person can complain here of any want of precision, either in the language used or in the opinion laid down ; but indeed even those who differ most widely from M. Ricord, must admit that he

<sup>1</sup> *Lettres sur la Syphilis* ; 1863, p. 157.

always speaks his mind with a clearness and thoroughness which are highly to his credit.

I have the misfortune to differ very widely from him on this subject, and must regret that M. Ricord does not refer us to at least one author for the description of a leprosy quite distinct from that of our day, seeing that I have entirely failed to meet with any such thing, and that I must, judging from the evidence already laid before the reader, believe that a contagious leprosy is in its way quite as unnatural a combination as a harpy or a dragon would be. That many of the old authors distinctly say leprosy is contagious and hereditary, just as we now speak of such properties in syphilis, may at once be admitted. The description given by Bartholomew Glanvile might pass for an ancient portrait of syphilis itself. This author, who according to Hensler was a nobleman of the house of Suffolk, and who flourished about the year 1360, in his book *De Proprietatibus Rerum*, a work which contains a faithful reflection of the most reliable opinions about leprosy, and particularly those of Constantine, and which was translated by John Trevisa, vicar of Barkley,<sup>1</sup> tells us that the complaint "comyth of fleshly lyking (Qy. lyging) by a Woman after that a Leprous Man hathe laye by her" (a statement which the reader is invited to compare with the caution given by Widman<sup>2</sup> soon after syphilis began to have a literature of its own); "also it comyth of Fader and Moder; ann so thys Contagyon passyth into the Chylde, as it ware by Lawe of Herytage. And also when a Chylde is fedde wyth corrupte Mylke of a Leprous Nouryce."

But Glanvile, like every author of repute who describes leprosy so that we can identify it at all, portrays a malady which corresponds to that of our age in every respect except that of its being contagious, a quality which I think we may safely refuse it. And if those who take M. Ricord's side of the question demand why we are to distrust on one point those whom we trust on another; why we reject a long-established principle laid down by

<sup>1</sup> Becket. *Philosophical Transactions*; 1720, p. 59.

<sup>2</sup> "Summopere tamen cavendum ne coitus fiat cum muliere pustulatâ, imo neque cum sanâ, cum quâ prius brevi temporis spatio concubuit vir pustulatus."

a succession of men evidently quite masters of the symptoms and course of the disease, I reply "by reason of the law which has ever governed the selection of evidence." When we find the symptoms of a disease unchanged at the lapse of several hundred years, as is the case with respect to leprosy, we may confidently assume that the earliest observers were in the right; when on the other hand we find that a contagious property, the belief in which is generally firm in proportion to men's ignorance of the case, becomes more and more dubious as leprosy is more carefully investigated, we are justified in doubting whether it ever was contagious. Leprosy is as hideous and fatal now as when we meet it in the pages of the greek physicians. We hear, it is true, in our day of cases so mild as to be of doubtful nature,<sup>1</sup> but we find these equally in the writings of Gersdorf and Gordon.<sup>2</sup> It is therefore in accord with sound argument to feel some scepticism with respect to leprosy having changed on a point, about which self-deception is so easy and of such frequent occurrence.

For ages men gave credit to the stories told by lepers about their having noticed, in a few days after a suspicious connexion, the signs which infallibly foretold the coming infection, just as credit was formerly given to the accounts by fanciful women about their knowing by their internal sensations that they had been impregnated. Such symptoms were specifically described by leprous patients and passed current like gospel. The libidinous disposition of lepers, so contrary to everything that later experience has revealed, their boulimia so expressly described by Aretæus, their urine being like that of a camel, the transmutation of other diseases into leprosy, and the existence of a special leprosy poison, conveyed from one individual to another by a process as material as the transfusion of blood, were just as devoutly believed in at the close of last century. On these points the pathology of Hensler is not a step in advance of that taught five or six hundred years ago; yet it would require a large stock of moral courage to broach such doctrines now.

*Syphilis first generally known after 1494.* — Although I think that the occasional appearance of constitutional syphilis,

<sup>1</sup> *Journal of Cutaneous Medicine*; Vol. 3, p. 75.

<sup>2</sup> Hensler; *Vom abendlaendischen Aussatze*; S. 177.



long before what is called the siege of Naples, must be looked upon as established, I still see reason to believe that it never showed itself to any great extent before that time, and that its nature, its individuality, was only imperfectly recognized by medical men till it appeared in Italy and Germany, clothed by terror and imagination in horrors worse than those of a pestilence—

“Omni que epidimiâ magis pestifera labes.”

If it had a name it could scarcely be said to have had a pathological status at the time when Charles the Eighth passed the Alps on his way to Naples; I find no valid reason for believing that any of the cotemporary authors mentioned either by Hensler or others had solved this part of the problem. Were there no other evidence on this head, the work of the genoese surgeon, John de Vigo, would suffice to settle the question. It is impossible such a description could have been written except by a man thoroughly familiar with his subject; the delineation of true chancre, the knowledge of the periods of incubation, the tracing of a crowd of symptoms to their true source, the recognition of the protean nature of these symptoms, the graphic accounts of the pains in the bones, all attest the hand of a master. Now de Vigo expressly says that the disease which broke out, at the date just mentioned, throughout nearly all Italy, was till then quite new.

This statement can of course be taken only as referring to the sudden spread of the disease, to the wide recognition of it as a pathological entity. De Vigo could hardly be ignorant of the fact that it had been noticed in a scattered form before 1494, and that the observations of it had been increasing of late years. If he were, we must conclude that he did not know what was certainly known to many others. Irrespective of the testimony of Delgado and Peter Martyr, of that of Schellig, Wimpheling and Widman, some of which might be remote and half forgotten, Summaripa (1496) fixes 1490 as the year in which it was brought to Italy from France; Baptist Fregosi, improperly according to Després written Fulgoso, (1509), says it had been spreading for two years before Charles entered Italy, and Caspar Torella (1497) places its origin in Auvergne in 1493, the year given according to Wendt



and the Chronist des Saalkreises for its appearance in Denmark and Saxony, and by Mason Good<sup>1</sup> for its extension through Auvergne and Lombardy. "Sir Ulrich Hutten, Knight of Almayn" also tells us<sup>2</sup> that it broke out in 1493 or thereabouts, but I confess to the most utter distrust in his chronology. He adds according to Beckett,<sup>3</sup> in a passage however which has escaped me, that he caught the disease when a child from his nurse or inherited it. The story is utterly improbable, but I suppose its moral really is that syphilis was rather prevalent at the time; for though Hutten wrote only for the public, whom he might justly enough calculate upon not being hyper-critical about dates, he was, I fancy, too shrewd a man to lay himself open to the chance of being convicted of such a gross error as this must have appeared, if the disease had really never been seen before 1494; for as he was born in 1488, the date of his infection could hardly have been later than 1489 or 90.

Although the two questions are quite distinct, yet the sudden recognition of syphilis, which occurred in 1495 and 6, and the rapid appearance of numerous complete descriptions of what had hitherto been touched upon, if noticed at all, in a loose and fragmentary manner, have been accepted as decisive evidence that syphilis was unknown till 1494. Sir Charles Bell informs us<sup>4</sup> that within a lifetime a hundred works had been issued on the subject of syphilis, whereas none were written prior to the era (1495, 6 and 7), from which all this publishing dates, and at the end of forty years we find this opinion virtually endorsed in several quarters. The influx is significant as to the sudden expansion of syphilis, perhaps also to the increase of facilities now afforded to authors by the growth of printing, but it has no weight whatever against the occasional appearance of syphilis long before the date mentioned.

The discovery of a new malady is sometimes so purely a matter of accident and time, that we can only arbitrarily connect such a fact with its first appearance among mankind. Take for instance the finding of Addison's disease as an illustration in support of

<sup>1</sup> *Op. citat.*, Vol. 3, p. 385.

<sup>2</sup> *A Treatise of the French Disease.* By Sir Ulrich Hutten, Kt. Revised and recommended to the Press. By Daniel Turner; 1730, p. 1.

<sup>3</sup> *Philosophical Transactions*; 1720, p. 49.

<sup>4</sup> *Institutes of Surgery*; 1838, Vol. 2, p. 229.

this statement. There is I believe nothing to show that any observer, before the time of this distinguished physician, ever noticed the staining of the skin, much less the connexion between it and disease of the supra-renal capsules. Yet unless we assume that it sprang up at the very time when Addison made it known, these phenomena must have yearly passed unnoticed, and certainly unsolved, before the eyes of hundreds of persons. The clue once found, any tyro can recognize the disease and connect the two sets of symptoms, and the difficulty is to understand why so many able men omitted to do so. In much the same way syphilis may often have been seen, even before the earliest of the dates I have given, without securing more than a passing notice; it may have lurked, and what is more there is a good deal of reason to think it did lurk, for years, possibly even a century or two, in Europe, sometimes mistaken for leprosy, sometimes under another and now forgotten name, much for example's sake as sibbens did in Scotland, its connexion with primary sore unsuspected till at last the truth burst upon men's minds.

Swediaur says,<sup>1</sup> speaking of the time of Celsus, "though however these local complaints, so much resembling our present venereal lues, were not marked or observed to be propagated by coition at so early a period, they were a few centuries after, a long while before the lues broke out, experienced and observed to be so by several successive writers; and that these diseases were the very same with our present complaints every unprejudiced reader may convince himself." Keeping in view Swediaur's prejudices, which would not permit him to see anything new or correct in Hunter's description of primary sores, he has stated the fact pretty fairly; the inference however which has been by more than one author drawn from it, that these sores were not contagious or venereal because Celsus does not speak of them as such, is misleading. Assumed ignorance on his part, beyond which the description given by Celsus does not carry us, is a very different thing from proof of their innocent nature, and the argument in any shape fails to show what it is manifestly intended to enforce, the non-existence of syphilis prior to 1494, for this is disproved, almost certainly as regards true syphilis, and beyond doubt as

<sup>1</sup> *Practical Observations on Venereal Complaints*; 1788, p. 7.

concerns chancroid. Besides when we reflect how difficult it often is now, after so much has been done towards elucidating the pathology and genesis of chancre, to determine the most important point about a sore, namely whether it is due to suspicious intercourse, we can readily understand that such a task was onerous enough for those who had nothing but the look of the sore to guide them, and who had no authorities, no inoculation experiments, to fall back upon, and that great allowance should be made for any shortcomings on the part of the famous roman author.

M. Chabaliér modifies the argument. He admits<sup>1</sup> the sores described by Celsus and all others up to 1494 to be venereal, but contends that they were merely chancroid, and that "there is no record in history of the existence of general symptoms prior to 1494." I need scarcely say that M. Chabaliér does not stand alone in his view, yet I must consider it, though substantially correct so far as regards the much earlier appearance of chancroid than of true syphilis, calculated to defeat the object he has in view, and to lay him open to the charge of overlooking all arguments and facts which may tell against his theory, which is of course that of uncompromising dualism. It is however of such importance to the decision of the question about the unity or duality of syphilis, that in the interests of the strictest truth it ought to be denuded of such a dangerous element as exaggeration.

*Rarely seen before that Date.*—The foregoing reasons then are those to which I appeal in support of the opinion that for years, possibly quite three quarters of a century, before the invasion of Italy by the French, constitutional syphilis was gathering round the more purely local disease and gradually taking root in Europe. But while this conclusion seems quite justified, I think the proofs are equally strong that the affection was till then rare; indeed I fancy the disproportion between evident traces of systemic disease, and the frequently recurring mention of primary sore, is calculated to strike the mind of any person whose attention is called even cursorily to the matter.

The reader will think that a good deal of this arguing is too circumstantial, that there is too much special pleading and fight-

<sup>1</sup> *Op. citat.*, p. 6.

ing with shadows. In extenuation I must urge that these points have also a material practical bearing upon the pathology of syphilis; they are not intended so much merely to establish its antiquity as an abstract historical point, as also to strike at the root of what I believe to be exaggerated and incorrect views respecting the nature of this disease when first generally observed; and such being their purpose, it becomes necessary to put them forward in the most noticeable shape that I can. It is of no use to attack what is thought to be a false view in too mild and tentative a strain; the question is one, not of style and arrangement of topics, but of effecting conviction, and as this is the all important point, it must be carried at any outlay of superfluity and repetition.

At the outset mention was made, that the great problem of the unity or duality of syphilis is to a certain extent wrapped up in its history, and we are now to face this part of the question. It is not an easy one to solve. Either secondary disease existed as far back as the days of Celsus, or the primary sore of his day began, ages after its first appearance, to take on the power of infecting the system, or a new disease was imported at a later date, and in time became so blended with the old one that we can no longer separate them, a state of things unknown with respect to any other disease. The dualists get out of the difficulty easily enough. They say with M. Chaballier that true syphilis, with its long train of constitutional symptoms, is quite distinct from the disease which appeared before 1494; the latter was simply chancroid, and the two have no more to do with each other than gonorrhœa has to do with either of them. But how do those who believe in the unity of syphilis propose to deal with such a problem? They tell us that the dry and purulent sore, the hard and soft, the phagedænic and the tiny follicular chancre, are but so many deceptive semblances taken on by one radically unchangeable type, from which they all spring and to which they all return, and that all these forms of sore may be followed by secondary disease; but they do not tell us anything which solves the riddle in the earlier part of this paragraph, and those who are fond of having matters cleared up might be excused for asking the reason of this silence. I ask and can scarcely ask too



urgently; if there be but one syphilitic virus, how is it that we cannot connect the primary sores so admirably described by Celsus with any after consequences?

*Ricord's Theory of the Origin of Syphilis from Glanders.*—We now arrive at the era of what is so frequently called the siege of Naples, when such an extraordinary outbreak of syphilis in a most malignant form is said to have taken place, but before going into this part of the subject, it will be necessary to examine one or two points connected with the origin of this disease, foremost among which is the conjecture thrown out by M. Ricord,<sup>1</sup> about the possibility of its being the offspring of glanders. The hypothesis has been caught up and repeated by at least two of his pupils, who however do not say what their real opinions are; my own must be that it is one of those seducing errors which, like Darwinism or animal magnetism, look very plausible till we ask for proofs. Of these M. Ricord does not offer us a vestige. Generally, when a hypothesis of this kind is put forward, it is at least accompanied by something which suggests a possibility, a potentiality, of being right, but here nothing is attempted beyond the statement by M. Beau, that glanders first appeared in the same year as syphilis, and the thread-bare story about the malignity of the latter and its transmission by the air. As to probability, M. Ricord evidently scorns to regard it. The frightfully fatal nature and rapid course of glanders in the human subject; the suddenness with which it must have changed from so lethal a condition to one which rarely destroys life and runs a long slow career; the utter want of all evidence that any like change has ever taken place in a disease transmitted from one of the lower animals to man, go for nothing with him, though they really concur to stamp the idea as one of the wild theories every now and then smuggled into existence by dint of conjectures, and ripened into a sickly maturity under the prestige of a great name. But even were all these reasons wanting, dates alone would overthrow it; for syphilis, as mentioned, undoubtedly appeared before the time, 1494, which M. Beau, the authority invoked by M. Ricord, assigns for the advent of glanders; a statement, however, diametrically opposed to the opinion held on this subject by one of the greatest

<sup>1</sup> *Op. citat.*, p. 161.

authorities in England, if not the greatest, Mr. Youatt, who says<sup>1</sup> that glanders "has been recognized from the time of Hippocrates, of Cos, and few veterinary writers have given a more accurate or complete account of its symptoms, than is to be found in the works of the father of medicine;" so that syphilis should also, according to M. Ricord, have been known to Hippocrates.

Besides it is pretty certain that the morbus gallicus was rather widely prevalent in the army led by Charles the Eighth; after discarding a good deal of exaggeration enough remains to prove this. But on M. Ricord's own showing the disease must at first have been glanders, and had this been the case it would have been impossible for men thus affected either to fight or fly. They can struggle on for a while with syphilis, but the other at once prostrates the strongest. Yet there is no evidence that military operations were ever suspended even for a day by any such cause. The pages of Daniel, Roscoe and Prescott contain no allusion to anything of the kind, though an event so important could scarcely have escaped notice. Coupling this silence with the fact, that a disorder, to have attracted notice in such stirring times, must have been rather widely diffused, and during the first ignorance of its nature would, under such circumstances, infect numbers of men, it becomes very doubtful whether glanders itself ever appeared then to any extent on the theatre of war. A form of morbus gallicus, or what was thought to be such, ending fatally at the expiration of a few days, is obscurely mentioned by some of the earliest authors on this disease,<sup>2</sup> and this may possibly enough have been glanders, as we know that the latter disease has been in quite modern times repeatedly mistaken for syphilis. This happened in the first case I ever saw of the affection, which was diagnosed as secondary syphilis and delirium tremens, the patient, when brought into the Royal Infirmary at Edinburgh, not being able to give any coherent account.

*Syphilis in the Bull and Boar.*—I think some of M. Ricord's readers might have furnished him with a better theory. For instance, should time verify the statement made by Dr. E. Andrews, they would have found the materials in it. This gentleman, who

<sup>1</sup> *The Horse*. By William Youatt; 1866, p. 203.

<sup>2</sup> Hensler; *Geschichte der Lustseuche*; S. 12 and 45.

is professor of surgery at Chicago College, says<sup>1</sup> that three instances of syphilis in the lower animals have been reported to him by a veterinary surgeon in that city. The first was that of a bull who had a chancre on the penis (!), followed by secondary disease; the second was also in a bull, but of much more doubtful nature; the third was that of a boar, supposed to have a primary sore followed by eruptions on the skin. He was also informed by the same surgeon that gonorrhœa is very common in bulls (!)

Possibly this accounts for the pleasant expression of countenance seen in these animals, who may think it is enough to be the slave and victim of man without sharing in his penalties and diseases. Or a bull in far off times, say about the date of the great outbreak of syphilis, when according to von Hutten,<sup>2</sup> cattle as well as men were attacked by it, may have suffered heavily in his mind from being affected in this way, and having thus acquired a misanthropic look, would certainly bequeath it to his descendants. The reader may think this ill-timed jesting. I reply that it is simply a legitimate extension of the doctrine that beasts have some share of reasoning power, and that, having acquired peculiarities they *must* transmit these to their offspring. I am quite aware that the argument lacks that solemnity which imposes on men, and that many people like to be imposed on, but I believe most sensible persons will admit, that there is nothing more in what I have said than is to be found in the writings of Prichard and a host of others. Reverting now to the point more immediately under discussion, it seems to me that, supposing any facts can be found in support of the statement that the bull and boar suffer from syphilis, we have before us the possibility of this disease being really communicated from one of the lower animals, particularly when the statement of Dr. Andrews is coupled with the announcement in the *Union Medicale* quoted by M. Ricord,<sup>3</sup> without date however, that in Italy syphilis has been seen in horses.

<sup>1</sup> *Medical Press and Circular*; 1872, Vol. 2, p. 34.

<sup>2</sup> *Op. citat.*, p. 7.

<sup>3</sup> *Op. citat.*, p. 156.

*Importation of Syphilis from America.*—I should not have adverted to this rather stale topic, had I not noticed in some recent works statements in which I feel unable to concur, and having gone rather carefully through some of the earlier authorities on this part of the subject, I will now endeavour to put as clearly as I can what appears to me the right view of it.

Astruc tells us, relying principally on the authority of Oviedo, and Ruy Diaz, a physician of Seville, that syphilis was brought by the followers of Columbus to Barcelona, where they gave it to the whole city, so frightening the people that “fasts, religious devotions and alms” were enjoined to propitiate the offended Deity who had thus chastised them. From Barcelona the disease was conveyed by the soldiers under Gonsalvo de Cordova to Naples, where the french soldiers caught it and conveyed it to France, particularly to Lyons by certain “Gens du Roy,” according to the chronicle of Estève de Mèges. Human credulity was rather severely taxed when it was asked to accept a tale which is as improbable as it is untrue. Nor will it avail to say that it is easy enough now for us to judge accurately, for the evidence against the story is as old as the story itself.

Of all the great men who ever lived Columbus was perhaps the least likely to commit the mistake attributed to him. The syphilis of that day is described as eminently disfiguring, prostrating and fatal, and it was going beyond all bounds to tell men that he, who was so wonderfully observant, would have overlooked the ravages of such a disease; that he, who had so much reason to be cautious, who was so continually watched by vigilant and relentless foes and detractors, would take men affected with such a loathsome malady to a city where the “Catholic King” himself was residing. He reached Barcelona with only six Indians and a few sailors. The former, being almost naked, would have exhibited visible traces of the complaint, and the latter must one and all have had syphilis to propagate the infection through even a noticeable portion of so populous a place. Had they been twice as numerous, and had they carried with them maladies so contagious as small-pox and scarlatina, they could not not have infected “the whole city,” and the much greater numbers of them left on the way did not infect Seville and Palos, a difficulty which



Girtanner gets over by saying<sup>1</sup> that Columbus landed at Barcelona ! Cordova, who took the disease from Spain to Naples, only went thither two years and two months after the great discoverer had contaminated the city, during all which time the disease, which created such astonishment and alarm in Italy and Germany almost as soon as it was generally known, must have ravaged Spain almost unnoticed.

Astruc's authorities are worthy of himself. The story of the american origin, though in the shape of a belief as old as the days of Torella<sup>2</sup> was invented or perhaps re-invented by Leonard Schmaus, a Strasburg, or according to Astruc, Salzburg, physician, of whom Mason Good curtly remarks, that "neither his history nor his arguments are in any degree satisfactory." Oviedo, on whom he so much relies, who was a boy of fifteen when Columbus first returned, and wrote his first work thirty-two years after this event, was treated by some of the best spanish historians of his day—Ferdinand Columbus, Herrera and Las Casas—as a literary Munchausen, the latter declaring that his works are a wholesale fabrication, as full of lies as of pages, a reputation which has not improved at the present day.<sup>3</sup> But unenviable as his notoriety might be, he is indebted here to the bad faith and heated imagination of Astruc, who in my opinion was a monomaniac—for I cannot understand any man, really right in his mind, persistently doing such things as he did, to quote no other instance translating "Ethiopia" by "the West Indies"—and from studying whose monstrous work M. Ricord piously entreats God to protect him.<sup>4</sup> Oviedo indeed maintained<sup>5</sup> that the disease came from the West Indies, but he referred to 1496, not 1493 as Astruc would have us believe. Astruc puts faith in him when he tells us that as a boy of fifteen he learned that Columbus had brought the disease to Barcelona ; he omits to do so when Oviedo, so punctilious in all matters of religion, is silent about the public fasts and penances

<sup>1</sup> Hensler ; *Ueber den westindischen Ursprung der Lustseuche*, S. 18.

<sup>2</sup> Chaballier ; *Op. citat.*, p. 89.

<sup>3</sup> *History of the Conquest of Peru*. By William H. Prescott ; 1855, Vol. 2, p. 44.

<sup>4</sup> "Dieu me preserve de le discuter." *Op. citat.* p. 169.

<sup>5</sup> Hensler ; *Belege*, S. 6.

enjoined to avert the pestilence, about which Peter Martyr too, who was at Barcelona at this very time and for six months after, who witnessed the arrival of Columbus and mentions the immortal navigator and his discoveries in several letters, does not say a word, while he is equally silent in them about the importation and diffusion of syphilis, and in his work *De rebus Oceanicis* about syphilis being found in the West Indies, though he had such excellent means of getting at the truth. As to Ruy Diaz, who wrote sixty-two years after the first homeward voyage of Columbus, he cannot be supposed to speak in any way with authority.

Oviedo seems to have cared little enough about the truth so long as he pleased the ear of his imperial master, and it is therefore really in no way to his credit here that he seems to have come very near the facts, for after all it is not improbable that a certain amount of syphilis was imported from Hispaniola, but too late to save the theory of Astruc from ruin. So early as the spring of 1494 we find the Spaniards at Isabella reported, on excellent authority<sup>1</sup> as suffering from syphilis, which they are said to have contracted from their licentious intercourse with the natives, while I do not find anywhere evidence in favour of the conjecture that this syphilis could at this time have been carried by Spaniards to the Islands. And whether endemic or not, this disease, which spread so slowly in Spain on its first appearance<sup>2</sup> seems for some reason or other to have raged contagiously in Hispaniola, for Columbus, at his third voyage thither in 1498, is said<sup>3</sup> to have found that the hundred and sixty men left, had all got syphilis.

*Syphilis in China and the East.*—My last reason for touching upon the american origin of syphilis is that put forward by myself a good while ago<sup>4</sup>—the probability that some day or other we might have the story told again, but this time in another form and of another country. A trustworthy witness, Dr. Thomas Nelson, stated before the Committee on Venereal Disease<sup>5</sup>, that in that

<sup>1</sup> *Works of Washington Irving (Life and Voyages of Columbus)*; 1866, Vol. 6, p. 244.

<sup>2</sup> Hensler; *Ueber den westindischen Ursprung der Lustseuche*, S. 34.

<sup>3</sup> *Ibid.*, p. 46.

<sup>4</sup> *Edinburgh Medical Journal*; Vol. xix, p. 7.

<sup>5</sup> *Report of the Committee on Venereal Disease*; 1866, p. 111.

immensely ancient country, China, syphilis had existed from time immemorial, and that he had found traces of it in Japan. Now it is true that intercourse between these countries and western Europe, or indeed any part of Europe, might be described almost as non-existent in the fifteenth century; still China had been reached from Italy two hundred years previously, and indirectly through Egypt and Arabia there was communication at least as far back as the days of the early caliphs, seeing that there is no great interval between the time when the Arabs pursued Yesdegird to the confines of Bactria, and that in which they carried their conquering armies into Spain.<sup>1</sup> Thus, through a route like that which the Polos took, syphilis might have found its way to some place of great resort like Constantinople, Negropont or Venice. Or its home may have been nearer, in an equally ancient country like India. Klein says<sup>2</sup> it had been known for ages in the East under the name of Moechō Wiadi.

*Sudden Increase of Syphilis after 1494.*—But by whatever means it got into Europe, it seems pretty certain that, at the date just recited, it spread with a rapidity which has furnished only too much food for credulity on the one hand and invention on the other. I will not weary the reader by quoting all the evidence on this head; one or two specimens will suffice. Twenty-six years after its great outbreak it had according to Lemaire spread over the whole world; “Par tout le monde universellement” are the words always quoted. Fracastori, one of the most learned men of his day, writing in the pontificate of Leo the Tenth, tells us that it had extended over Europe and part of Asia and Africa; and Hensler, the historian of syphilis, says<sup>3</sup> that it seized upon a sixth part of mankind (befing den sechsten Theil der lebenden Menschen). Chabaliér’s figurative language is quite as strong as that of Lemaire, for he observes that the disorder appeared in nearly all ranks of society “almost in the twinkling of an eye.”

I wonder if any person fit to be at large ever believed all this, and if men do not believe it, why is each generation of readers doomed to wade through these mazes of fancy, worse if possible

<sup>1</sup> *Works of Washington Irving (The Successors of Mahomet)*; Vol. x, p. 150, &c.

<sup>2</sup> Adams; *Op. citat.*, p. 191.

<sup>3</sup> *Geschichte der Lustseuche; Vorbericht.*

than the exaggerated figures of speech in which so many historians indulge? Had the disease spread in the way described, it would have brought great part of the business of life to a standstill, and have seriously thinned the population. Let the reader picture to himself the state things would be in, with a sixth part of the population prostrated by a disease so fell as the syphilis of that day is described to be, and lasting for so many years. But exaggeration has always dogged the footsteps of syphilis, and men seem quite content to let it do so. Retrenching however sufficiently to allow for romancing, we may admit that the disease progressed at an unusual rate. Had it died out once for all it might have been taken for an epidemic. M. Ricord speaks<sup>1</sup> of it as such, and sees in its rapid diffusion ground for the theory of its transmission by the air. I presume future ages will rather think that he might have found in such a fact ground for admitting what he so long contested, namely that secondary syphilis is under certain circumstances conveyed by contact, and very quickly too when no precautions are taken to guard against the danger; that this and the ignorance of men on the subject were the reasons why the disease extended so rapidly; and that there was no epidemic in the proper sense of the word, an error justly opposed by so sensible an author as Fournier.<sup>2</sup>

For, giving due weight to certain contingencies, such as ignorance of the contagious nature of the disease, and the crowding together of troops, I do not know of a single authentic fact which shows that syphilis was communicated more rapidly in 1495 and 6 than has occasionally happened since that time. With a malady creeping up, as it had been doing for some years, nothing was needed beyond some fortuitous gathering of people (a few of them very probably affected with syphilis) such for instance as would be required for the purposes of war, to develop the tragedy, as it has been called, of Rivalta on an amplified scale, with a kingdom for its arena and an army for its victims. Such a possibility will not appear overstrained to those who have read in Swediaur<sup>3</sup>, that syphilis, in a thinly peopled district like that round the Bay of St. Paul, extended

<sup>1</sup> *Op. citat.*, p. 161.

<sup>2</sup> Fracastor; *La Syphilis*. Par le docteur Alfred Fournier; 1870, p. 44.

<sup>3</sup> *Op. citat.*, p. 173.



so fast that in 1785, when the observations he relies on were made, 5801 persons were known to be suffering from it, besides many who concealed the fact; and though he is sometimes very inaccurate, I fancy we should be safe in admitting the number to have been large. Nor is this a solitary fact. Haeser gives<sup>1</sup> two instances where syphilis, in the eighteenth century, spread with great rapidity, an outbreak at Zurich being so bad that it is spoken of as a raging disease (*grassirende Krankheit*).

*The french Army not the sole Medium of Diffusion.*—Ever since the time of Sebastian Brant, 1496, and of Conrad Gilinus, 1497, an opinion has prevailed more or less extensively, and is again adopted by one of the most recent authors<sup>2</sup> from Simon, that it was the soldiers of Charles the Eighth who took syphilis with them into France and Germany, having of course caught it in Naples, whither the disease had been transported from Spain. Although some writers, who ought to be authorities, contradict each other a good deal here, the predominant theory seems to be that the French are to have the credit of sowing syphilis so broadcast, and I therefore propose to deal with it. That many of the soldiers were infected is probable, but there are good reasons for considering that an extreme view has been taken of the mischief they disseminated. The [number of men did not, at a fair computation, exceed twenty thousand when Charles left Asti on his road to the south of Italy.<sup>3</sup> The soldiers supposed to have been principally instrumental in diffusing the disease were the Swiss and Germans, and of these only six thousand, chiefly Swiss, started for the seat of hostilities,<sup>4</sup> and only twenty-five hundred left Naples on the homeward march, many probably remaining there, as only part of the army was to return. Indeed the whole body of troops, which then prepared to quit Italy, did not number more than nine thousand fighting men,<sup>5</sup> who were most seriously thinned down by the battle of the Taro, the painful retreat and the hardships they endured.

Those left behind got on still worse. Of five thousand men

<sup>1</sup> *Op. citat.*, Vol. 2, p. 291.

<sup>2</sup> Auspitz; *Die Lehre vom Syphilitischen Contagium*; 1866, S. 29.

<sup>3</sup> *Histoire de France*. Par le Père Daniel; 1742, Tome viii, p. 595.

<sup>4</sup> *Ibid.*

<sup>5</sup> Prescott; *History of Ferdinand and Isabella*, Vol. 2, p. 39.

who marched out of Atella not more than five hundred ever reached their native country. Upwards of four thousand more perished in the Isle of Procida,<sup>1</sup> and Després says,<sup>2</sup> that out of the army left under the command of Gilbert de Montpensier, which a short time before (swelled I suppose by reinforcements) at Salerno amounted to nineteen thousand, scarcely three hundred re-entered France. We may therefore believe the story that not more than one-fourth part of the original army ever got back, and if the statement of a much respected author, Fallopius, that the whole french army (*ferè omnes*) was infected with syphilis,<sup>3</sup> be correct, even this number must have escaped from Italy by something like a miracle. The Swiss and Germans were in as bad a plight as any. "They made their way as they best could through Italy in the most deplorable state of destitution and suffering."<sup>4</sup> By a passage which Haeser quotes<sup>5</sup> from Meyer Ahrens, we learn that the Germans and confederated mercenaries, particularly those whom the king left behind at Naples, were in a frightful condition. Those, it tells us, who did not fall by the daggers of the Italians, who did not perish as solitary stragglers of hunger and thirst, or by poison, in barns or fields, by the roadside or on a dunghill, were so wasted as hardly to be recognized by their friends.

South Germany and France, if not Switzerland also, were then somewhat thickly peopled and thriving countries, inhabited by highly gifted races of men, and advanced in culture. That the broken remnants of a small army disseminated a complaint, which must have made them objects of abhorrence to every beholder (and which, had it been the dire malady described by so many authorities, not unfrequently fatal, and from which according to Sabellicus few people recovered, would have invalidated them to the last man before they re-crossed the Alps), so extensively as to fill whole kingdoms with syphilis, is I submit, to levy a rather extortionate tribute upon our easy belief. Yet unless I have quite misunderstood some modern authors, this is what they mean,

<sup>1</sup> *Life and Pontificate of Leo the Tenth.* By William Roscoe ; 1806, Vol. 1, p. 361.

<sup>2</sup> *Op. citat.*, p. 39.

<sup>3</sup> *De Morbo Gallico* ; 1563, p. 1.

<sup>4</sup> Jovius. Quoted by Prescott. *Reign of Ferdinand and Isabella* ; Vol. 2, p. 61.

<sup>5</sup> *Op. citat.*, Vol. 2, p. 325.

and what their authorities mean ; for instance Gruenbeck expressly says that it had made its way into every part of Germany.<sup>1</sup>

The remark, that this disease must have made these wretched soldiers objects of abhorrence, requires some explanation. We read that, at the times when these scenes were passing before men's eyes, a patient affected with syphilis emitted an intolerable stench, stank worse than a monk of the olden time ; that he was emaciated as if by famine, and that he was covered with scabs "from the skull to the knee-cap," the forehead, nose and ears being studded with great rupial crusts like "little staves, horns and teeth" in shape, such being at any rate the plight the Italian soldiers were in. A worthy alsatian priest of that day (1510), who chronicles the popular belief that this was the disease with which "the devils" (die Tuffel) plagued Job, improves so far upon the foregoing description as to tell us that the growths were as long as the joint of a man's finger. Even the well-to-do, if known to be infected, were shunned by their friends, and it was considered a testimony of devoted attachment to hold intercourse with creatures so marked by the curse of Heaven as the venereal. I do not say that all this or any part of it is true, but such is the description, and I ask the reader how he proposes to receive the idea of men in this state being generally admitted to such close contact with people as to diffuse this malady on every side. But the more narrowly we look at the question, the more strongly does the suspicion take root in our minds that the story of the French catching the disease at Naples is a piece of invention, to the circulation of which Ulrich von Hutten, though he does not restrict himself entirely to this theory, materially contributed by the great popularity of his work. Most of the earlier authors, who wrote about the time of this event, do not, as Beckett puts it,<sup>2</sup> "say one Word about the Neapolitan Story," that is to say of the spreading of the morbus gallicus having "had its Rise from the French Soldiers' Conversation with the Italian Women."

*Great Severity of Syphilis at its first Outbreak and subsequent Decline.* — With few exceptions writers on this disease have

<sup>1</sup> "per totum Germaniæ tractum, urbes, oppida, castra, pagos et villas."

<sup>2</sup> *Philosophical Transactions* : 1720, p. 47.

affirmed that, when it first broke out at the close of the fifteenth century, it was, and for some years after continued to be, of a far more formidable nature than at present, eating deeply into the flesh and destroying the bones extensively,<sup>1</sup> besides signalizing itself by the presence of some malignant symptoms previously recited. It ran its course too with alarming rapidity, change of colour of the face and great depression of spirits coming on within three or four days after infection.<sup>2</sup> Haeser indeed thinks<sup>3</sup> we are justified in believing that the interval between the appearance of the primary sore and that of the skin disease was shorter than now. The disease was so infectious as to taint, not only the air of the house but even the trees and plants, particularly the vines and cabbages.<sup>4</sup> After the complaint had for a few years alarmed and astonished the world, it underwent a singular decline, or as we find it put in Turner's translation of von Hutten, "gradually abated of its Fierceness." According to an incomprehensible statement of Hensler,<sup>5</sup> the real old fierce pestilence of syphilis died out altogether, so that what we recognize under that name has nothing to do with the epidemic. Were this story about the malignant nature of syphilis at the outset merely an old belief, I should put it down as one of the tales incident to the subject, but it is too generally current for that. For instance, if we take the men who may be considered as fairly representing their respective countries in this department, Lee, Ricord, Bumstead and Haeser, we find them all pledged to this view of the case, the last named author perhaps not quite so markedly as the others.<sup>6</sup>

Mr. Lee, the first living authority in England on syphilis, quotes<sup>7</sup> Fracastori as witness on this point, the following being the passage selected.<sup>8</sup>

"Protinus informes totum per corpus achores  
Rumpebant, faciemque horrendam et pectora faede  
Turpabant: species morbi nova, pustula summæ

<sup>1</sup> Haeser; *Op. citat.*, Vol. 2, p. 237.

<sup>2</sup> *Ibid.*, p. 229.

<sup>3</sup> *Ibid.*, p. 231.

<sup>4</sup> Hensler; *Belege*, S. 9.

<sup>5</sup> *Vom abendlaendischen Aussatze*; S. 230.

<sup>6</sup> *Op. citat.*, Vol. 2, p. 187.

<sup>7</sup> *Syphilitic and Vaccino Syphilitic Inoculation*; 1863, p. 152.

<sup>8</sup> Hieronymi Fracastorii; *Syphilis*, 1536, L. 338.



Glandis ad effigiem et pituita marcida pinguis :  
Tempore quæ multo non post adapertha dehiscens,  
Mucosa multum sanie, taboque fluebat.  
Quinetiam erodens alte, et se funditus abdens  
Corpora pascebat misere, nam sæpius ipsi  
Carne sua exutos artus, squalentiaque ossa  
Vidimus, et fœdo rosea ora dehiscere hiatu,  
Ora, atque exiles reddentia guttura voces.  
Tum sæpe aut cerasis, aut Phyllidis arbore tristi,  
Vidisti pinguem ex udis manare liquorem  
Corticibus, mox in lentum durescere gummi.  
Haud secus hac sub labe solet per corpora mucor  
Diffluere : hinc demum in turpem concreescere callum.  
Unde aliquis ver ætatis, pulchramque juventam  
Suspirans, et membra oculis deformia torvis  
Prospiciens, foedosque artus, turgentiaque ora,  
Sæpe deos, sæpe astra, miser crudelia dixit.  
Interea dulces somnos, noctisque soporem  
Omnia par terras animalia fessa trahebant :  
Illis nulla quies aderat, sopor omnis in auras  
Fugerat : iis oriens ingrata Aurora rubebat :  
Iis inimica dies, inimicaque noctis imago.  
Nulla Ceres illos, Bacchi non ulla juvabant  
Munera non dulces epulæ, non copia rerum,  
Non urbis, non ruris opes, non ulla voluptas."

This passage may, I think, be fairly translated as follows.  
"Straightway filthy pustules broke out over the whole body, disfiguring the face and chest in a revolting manner; a new species of disease. The pustule, which was much like the top of an acorn, and full of heavy phlegm, soon gaped and poured forth a quantity of mucous sanies and gore. Then making its way inwards it preyed grievously upon the frame. But oftener still we saw the limbs stripped of their flesh, and the repulsive bones, while the mouth gaped with a horrible opening; the (state of the) mouth making the voice shrill. Then, often, as thou has seen in the cherry or sad Phyllis's tree (the almond), the gross fluid distil from the moist bark and the gum slowly harden, even so under

the power of this foul sickness was the mucus wont to flow from the body and thicken, in time, into nasty crusts. Thus a miserable sufferer, in the spring of life, sighing after delightful youth, now grimly regarding his deformed limbs, his loathsome frame and swollen mouth, would upbraid, sometimes the gods, sometimes the stars, with cruelty. While every wearied animal on earth enjoyed the privileges of sweet sleep and the stillness of night, there was no peace for these victims of misfortune, and slumber fled from them. For them Aurora dawned unwelcome, and night came in the likeness of a hideous spectre. No delicate food nor gifts of Bacchus availed them, nor pleasant feasts or plenty, the wealth of the city or country, nor any kind of pleasure."

Such is the account given by this "most learned of men," this "mighty physician and poet," "*medicus ingens ingens que poeta.*" Of the poetical merits of the "*Syphilis*" I do not profess to be a judge. A great modern scholar, Dr. Parr, has pronounced it to be "nearly equal to *Virgil*,"<sup>1</sup> and I bow to his decision. But as a piece of medical evidence I say at once that this part of it at least will not bear looking into. Everything conspires too, to prove that, if Fracastori ever saw the disease at all, he did not do so till long after it had "abated of its Fierceness," and that he was not an eye-witness of the dire symptoms he has described. An excellent scholar, Roscoe, considers that the date of his birth may be fixed "with tolerable certainty" in 1483. Consequently he could only be eleven years old when the great outbreak of syphilis began; indeed it is interesting to notice that some of the most startling narratives date long after the events chronicled, such as that of James Bethencourt, 1527, and Lawrence Phrisius, 1532, though it must be admitted that the accounts by Gruenbeck, 1496 and 1503, and Sabellicus, 1502-9, are highly enough coloured. Up to the date of the invasion of Italy, and for long after, Fracastori resided in the north-east of the kingdom, at Verona and Padua, far away from the chief scenes of war and pestilence; so that we may entertain grave doubts as to whether he ever met with more than a stray case

<sup>1</sup> *Memoirs of Thomas Moore.* By Lord John Russell; 1853, Vol. 2, p. 147.

of syphilis before the date of the battle of Ghiarandaddo, 1509, after which he returned to Verona and devoted himself to literary and scientific pursuits.

Men familiar with his biography will, I fancy, admit that he could not have cultivated practical medicine to any great extent, for like many in that classical age he gave up a large portion of his time to other studies. To be a profound scholar and a proficient "in mathematics, in cosmography, in astronomy and other branches of natural science," demands so much expenditure of time as to leave but a scanty residue for the investigation of disease. Those who can swallow the fables told, under the guise of biography, in the lives of Pico de Mirandola and the admirable Crichton, may believe that a youth of genius, who has mastered several branches of learning, may also be a great physician, and, what is more to our purpose, have found time to examine carefully the course of a malady which has tried the powers of so many famous men; but the common experience of our profession has decided, that a jealous and absorbing art like medicine suffers no intruder near, and that he who would excel in it must relinquish all hopes of celebrity in other branches of knowledge.

Farthermore it is likely that Fracastori did not practise in a way likely to yield any results worth notice. Among his merits was that of exercising his practice gratis (*citra lucrum*), which, I suppose, means, when reduced to plain terms, that he was a mere dabbler, and scarcely better fitted to give an opinion than the benevolent curate of some country district, who, having read through Buchan, concludes that he can now minister to the bodily as he does to the spiritual maladies of his flock, and forthwith proceeds to act as medical adviser. Lastly the famous physician and poet seems to have had but a slender acquaintance with the standard medical authorities on the subject, as is evidenced by the great discrepancy between his views and theirs. Indeed he is far behind the best of them, and neither as a pathologist or a practitioner can be said to equal Leonicens, Torella or de Vigo. His looseness of expression, even in points where he is supposed to have been such a proficient, and where he might so easily have arrived at accuracy, is startling. For instance he says that syphilis broke forth *about* 1490, at the time when the French under

Charles the Eighth occupied the kingdom of Naples, though all the world knows that this took place quite four years later.<sup>1</sup>

We identify the disease as it appears in his poem by the name he gave it and the narrative of its outbreak, not by the similitude of the symptoms with those set forth by any trustworthy author of his day. The description just quoted is superficial, as is also that in his medical work, and, for medical purposes, incomplete, seeing that though there is a beginning, there is no end to it, and that we can only guess at the previous career and subsequent fate of the imaginary sufferer. But though it is intended to awaken horror, I cannot see that the severity of the complaint portrayed exceeds that of the malignant syphilis spoken of by Mr. Walter Coulson,<sup>2</sup> the acute secondary ulceration of which Dr. John Morgan speaks,<sup>3</sup> or the eruption like rather confluent small-pox mentioned by Basereau;<sup>4</sup> descriptions which should be contrasted with the statements of Torella and Beniveni, that pustules did not preponderate in these early days,<sup>5</sup> and that of Tomitanus<sup>6</sup> that pustules scarcely appeared in his time. It is difficult to understand how any disease could be much worse than that described by the modern writers just quoted, and if we were told the contrary on even much better evidence than that of a poet, I should still feel sceptical. For inasmuch as authority and tradition are powerless to change the laws of nature, so they cannot claim a hearing when arrayed in support of anything which premises a gross infringement of these and violates probability. It is violated when we are taught that men languished for years under a disease much worse than the worst syphilis of the present day, such as we understand that of Fracastori was. A disease so frightful would have made short work with its victims, and the patient would not long have endured the misery of contemplating his fleshless limbs, seeing that death would have speedily relieved him from any such task, and have spared the physician the task of looking upon his "repulsive bones." But if the reader still think the old version the right one,

1 "in italiam vero ferè iis temporibus erupit, quibus Galli sub rege Carolo regnum Neapolitanan occupavere, annos circiter decem ante 1500."

<sup>2</sup> *A Treatise on Syphilis*; 1869, p. 141.

<sup>3</sup> *Practical Lessons on the Contagious Diseases*; 1872, p. 157, 229.

<sup>4</sup> *Op. citat.*, p. 418.

<sup>5</sup> *Ibid.*, p. 5.

<sup>6</sup> Haeser; *Op. citat.*, Vol. 2, p. 269.



it will be a satisfaction to him when he knows that these afflicted people kept up their appetites and even gave away to a little gluttony.<sup>1</sup>

Leaving out of sight the exceptionally bad cases, does Fracastori, either in his poem or his later work, make the disease worse than the realities of everyday life? Neglected and ill-treated syphilis was always and is still a formidable and repulsive malady, and no one can be surprised to learn that, when it had not been energetically met, there were bone pains so severe as to prevent sleep, and bad suppurating tubercles. Besides Fracastori gives testimony against the severity because he does so against the decline of it. He wrote at a period much later than that assigned to the improvement in the character of the disease, yet he says,<sup>2</sup> not that it had ameliorated but that it had altered, there being now for the last six years scarcely any eruption and almost no pains or very slight ones, but numerous cases of gum knot, there being no mention that they are rare,<sup>3</sup> and certainly the present age has not improved in this respect. The last part of the assertion looks like carelessness of expression, gum knots having been long before described by so well known an author as de Vigo, in words which an old translator renders as "certain knobbes of grosse and phlegmatike matter." It is quite natural that there should be little or nothing said about gum knots in the earliest writers, for the reason that these growths had not then had time to show themselves. And granting anything so improbable as the assertion about the bone pains to be correct, we must conclude that syphilis is now very much worse than it was; indeed according to Fernellius<sup>4</sup> the osseous pains and gummata were again bad in 1557. But it is very questionable whether Fracastori ever thought much about accuracy, and whether he did, or cared to do, more than reflect, in elegant and classic Latin, the opinions on syphilis current among the scholars of his day. The poem

<sup>1</sup> Pinctor; *De morbo foedo*, &c.

<sup>2</sup> Hieron. Fracastorii; *Operum Pars prior*; 1591, p. 179.

<sup>3</sup> "Porro et annis labentibus, annis jam ferè vi in quib. nunc sumus, magna rursus mutatio jam facta est ejus morbi: quippe quam in valde paucis pustulæ jam visantur, et dolores ferè nulli aut multo leviores, gummositates vero multæ."

<sup>4</sup> Haeser; *Op. citat.*, Vol. 2, p. 270.

especially looks as if he were more intent on writing like a scholar and a gentleman than a physician.

Some authors, referring to the change in the nature of syphilis mentioned by Fracastori, tell us that alopecia first appeared in his time. I am disposed to think that the passage on which this opinion is based means something very different ; assuredly he was not thinking on what we constantly speak of as a sign of constitutional infection. First I contend that the passage shows Fracastori's ignorance practically of the disease, for, from the way in which he describes the symptom, I should say that he had confounded tinea decalvans in a syphilitic subject with the effects of syphilis, though it might be the affection Bassereau speaks of,<sup>1</sup> which is unknown to me. All the medical evidence of that day is opposed to the surmise that total loss of the hair was a common sequence of venereal disease, and though we are told that at one time the beard was in some places cherished as a sign that the wearer had not suffered from the dreaded complaint, this only shows that an occasional circumstance has been magnified into a rule of pathology, and that a superstition, such as that upon which this ceremony of wearing the beard reposes, is more easily invented than overthrown. Besides Fracastori<sup>2</sup> tells us that the teeth dropped out, and that this was not owing to the mercury but to the disease, a part of his narrative which certainly needs confirmation. In the same way I believe the accounts about the stupor, which is said to have, in the infancy of syphilis, preceded the outbreak of the constitutional disease, and which Fournier tells us<sup>3</sup> he has noticed, are to be explained ; a fortuitous occurrence being expanded into a sign of almost pathognomonic value.

One word about the osseous pains under which the earlier sufferers from syphilis laboured, and which have so often attracted notice. To judge from the language made use of, these torments ought to have been something dreadful, and one might think the victims of them went through a martyrdom which would have speedily broken down our less robust frames. The older writers constantly expatiate on this theme, and I suppose I should be within bounds if I were to say that the tale has since been re-told

<sup>1</sup> *Op. citat.*, p. 74.

<sup>2</sup> *Operum Pars prior*, p. 180.

<sup>3</sup> *La Syphilis* ; p. 50.

a hundred times. Yet if we can repose faith in the statements about the quickness with which such pains yielded to simple means, we must believe that the descriptions were indeed painted "in lively colours." For instance Pinctor speaks of the pains as shifting their seat, and says that when inunction was carried out they were relieved in four to six days, and the patients were completely cured of them by the end of the eighth day. I give his own words for this.<sup>1</sup> Are we then really to understand that wandering pains, which could be cut short so summarily, were ever of such severity as to justify the impression which has been taken up about them?

As to the more rapid evolution of syphilis at its first appearance, the evidence seems to amount to this: There is no doubt that some few cases of this kind are reported, very briefly and imperfectly, or only just alluded to; still, most probably with substantial accuracy. But I need scarcely say that in the present day instances of hasty evolution are occasionally to be found. One of Torella's five cases is frequently cited<sup>2</sup> as conclusive evidence respecting the more rapid march of syphilis at the very outset, but, with due consideration to the less attention then paid to dates, I see little difference between the nature of the disease mentioned and that detailed by Dr. John Morgan<sup>3</sup> and by Bassereau;<sup>4</sup> while there is quite as good evidence that the complaint usually, if not always, proceeded at the same rate in the fifteenth as in the nineteenth century.<sup>5</sup> There being then, in my opinion, no proof of greater malignity at the outset, the story of the decline needs no refutation, for that which did not exist could not abate.

But whether Fracastori's evidence was for or against the common belief, I would equally banish it as I would everything like it. If we are to get at the truth it will only be by excluding everything not thoroughly trustworthy, and under this head we

<sup>1</sup> "in una hora in capite, in alia hora in tibiis et brachiis etiamque in musculis" . . . "sed post, transactis 4 diebus vel 6, quieti e doloribus fuerunt et pustulæ omnes remotæ; et sic continuando ipsas unctiones in 8 diebus a doloribus fortibus sanati fuerunt."

<sup>2</sup> Chabaliér; *Op. citat.*, p. 91.

<sup>3</sup> *Op. citat.*, p. 104.

<sup>4</sup> *Op. citat.*, p. 164.

<sup>5</sup> Torella; Gruenbeck, *De Mentulagra*, &c.

cannot rank the effusions of an author who was a poet, not a physician. We may perhaps confide implicitly enough in poets, when they describe the spirit of their times and the springs of human passions, but in pure matters of fact the greatest of them are not to be trusted. Very likely Homer faithfully reproduced the manners and customs which prevailed in the grecian age of bronze, and Shakspeare those current in the days of Elizabeth ; but, to select only two out of almost countless instances, the most credulous schoolboy never believed that Achilles leaped "far as a spear can fly," ὅσον τ' ἐπὶ δούρῳς ἐρωή, nor does the rudest seaman require to be told, that the ocean does not "mount the welkin's cheek" and dash out the fires of heaven.

I would mete out the same measure to von Hutten, who seems to have been, if not the founder, at least the chief apostle of the creed about the decline of syphilis at the end of seven years, and from whose work Fracastori possibly drew some of the materials for his description. It is certainly calculated to excite a suspicion of this kind, when we compare those passages in the poem on syphilis relating to what are evidently considered to be the most salient features of the disease, that is to say the filthy pustules, the wasting and the night pains, with Hutten's account. "They had," he says,<sup>1</sup> "Boils that stood out like Acorns, from which issued such filthy stinking Matter," &c.;<sup>2</sup> and again, "The Sick grows lean, his Flesh wasting away, so that there remaineth only the Skin as a Cover." What tends to confirm the surmise is that at a later date Fernelius repeats almost the words of von Hutten.<sup>3</sup>

From whom this restless mortal derived his facts we are left to conjecture, as he does not say a word on this head, and judging from the way in which he speaks, with one or two exceptions, of medical men, he was not likely to trouble them for information. Most assuredly we should seek in vain for even an idea of the opinions held by the leading physicians on the subject of his

<sup>1</sup> *Op. citat.*, p. 3.

<sup>2</sup> The words in the original are "Ulceræ in quernæ glandis speciem et magnitudinem, aspera, exporrecta, spercus ab his profluens humor." *De Guaiaci Medicina*, Caput I.

<sup>3</sup> Haeser ; *Op. citat.*, Vol. 2, p. 272.



treatise, and he, who had no better authority than von Hutten to guide him, would form a very inadequate estimate of their labours and their merits. So far as I have been able to make out, the only author of repute in that time, who even expresses an opinion about this sudden mitigation of syphilis, is de Vigo, and he merely speaks<sup>1</sup> of its being less contagious than at first; an opinion possibly founded on the fact that in its earlier days men thought the disease was epidemic, and did not take so much pains to avoid contact, or, still more probably, on exaggerated stories put in circulation during the first period of alarm.

Judging from the work just quoted, and from a careful perusal of his biography,<sup>2</sup> I am inclined to view, not only von Hutten's opinions, but a great deal of the often told story about his eleven salivations and cure, with the greatest scepticism, or perhaps it would be more straightforward to say, that I believe one part of the narrative to be exaggeration and the rest of it fable. In the first place it is almost certain that he never saw any cases but his own and his father's, and of the latter very little indeed, as he only visited home once or twice after he had himself contracted the disease. Of the great outbreak of syphilis in Italy and Germany he could have seen nothing, for he was born in 1488, and all the worst features of the so-called epidemic had, according to his own express statement,<sup>3</sup> passed away by the time he was twelve years old. He opens his book on syphilis with an error, or at least a vagueness, calculated to shake all faith in his accuracy, for he says that the disease broke out in 1493 or thereabouts, and in the french army at Naples, whereas Charles the Eighth did not start from Asti till the sixth of October, 1494; nor is this a mere misprint in the figures, for the date is written. He does not seem to have known that the popular name of syphilis, the sickness of St. Mævus, really belonged to leprosy, and was a mistake either on his part or that of the vulgar whose opinions he copied. That he ever studied the disease is simply impossible. A man who was perpetually quarrelling and agitating, rambling and writing, and who at his early death left behind him seventy-two works,

<sup>1</sup> Fol. clx.

<sup>2</sup> Ulrich von Hutten. Von David Friderich Strauss; 1871.

<sup>3</sup> "Neque enim septimo multo annum supra ejus grassatura fuit."

many of no contemptible length, could have had little time to spare for such an absorbing task as the investigation of syphilis. His book on the subject bears every mark of a hasty production, written only for a popular purpose. The excellent biography of him by Strauss, as just mentioned, makes his eleven courses of mercury something more than doubtful ; and his guaiacum treatment, instead of curing him to the confusion of those impudent pretenders, the physicians, really failed to remove the disease, which, after a seeming improvement, carried him off in his thirty-sixth year.<sup>1</sup>

Interesting, therefore, as his work is and always will be to the medical scholar and antiquary, I must enter my protest against ranking it in the same class with the writings of experienced physicians of his day ; who, however low some of the moderns may rate them, cultivated their profession with honourable industry, truthfully observing and noting down numbers of facts calculated in their opinion to advance science and improve treatment.

From Mr. Lee<sup>2</sup> we learn, that the outbreak of syphilis at Rivalta was accompanied by an eruption of so-called pustules, as a result of which it was in some instances confounded with smallpox, and that the same thing happened when the disease appeared in Europe at the close of the fifteenth century. As Mr. Lee does not quote his authority we must take the case on his own showing, which we may very safely do. The occurrence is probable enough. Secondary pustular eruptions, when copious and occurring at an early date, accompanied by feverishness, have been rather frequently than otherwise mistaken for smallpox. I have myself seen two instances of this error, which indeed has occurred often enough to need no particulars in the way of proof. But, in such case, what becomes of the theory about a decline in the severity and a change in the character of syphilis ? Tried by this test, how can either have happened if the disease reappear in 1861, with such a serious symptom as syphilitic ecthyma attached to it in the same guise as on its first reputed outbreak ? A visible and tangible disorder like syphilis would be apt, one might think, when it grows milder, to change its look at the same time. It

<sup>1</sup> Strauss ; *Op. citat.*, p. 533.

<sup>2</sup> *Syphilitic and Vaccino Syphilitic Inoculation*, p. 154.

may be said that the complaint resumed its old severity at Rivalta because it broke out in a new country ; in that case every little outburst of syphilis, in hitherto uncontaminated places, ought to take on the features which the terrible epidemic wore to the eyes of Gruenbeck and Fracastori. But I am prepared to go beyond mere reasoning, and say at once of this special symptom, that I do not think it could have been worse than we sometimes see it now. I attended a case where the number of pustules was so great that it might be spoken of as enormous ; Bassereau says<sup>1</sup> he has seen persons whose whole skin was covered with the pustules of syphilitic ecthyma, and Dr. John Morgan, at so recent a date as 1872, says<sup>2</sup> that he had under him a case where the pustules appeared as a first rash, and were so thick that "the finger's point could hardly be laid on a part of the body clear from the disease."

If, then, we shut our ears to the fables told by romancers and poets, and confine the evidence to that of persons practising medicine, I think we shall find that the foundation for this superstructure of a disease appalling beyond conception, invading whole kingdoms at a time, and divesting itself of its terrors at an epoch so congenial to superstitious notions as the end of the seventh year, melts into air ; and that, keeping in view the want of influence exerted by proper treatment, there is nothing to warrant the belief that the disease, as pictured by de Vigo or any reliable authority, was worse than, or materially different from, what we may often see now in a Lock hospital.

This refers distinctly to the constitutional effects of syphilis. Of the primary sore we do not have so much in the way of exaggeration. It seems, however, that phagedæna and sloughing prevailed in the french army. The formidable look and intractable nature of these, especially the former, were well calculated to awaken terror in both patient and surgeon. As to sloughing, we may be pretty sure that wherever large bodies of men get together, and when we find privation, fatigue, and debauchery doing their fell work among persons exposed to the contagion of syphilis, there we shall have sloughing. Such has ever been the story. The accounts given of the ravages of syphilis in Lithuania

<sup>1</sup> *Op. citat.*, p. 418.

<sup>2</sup> *Op. citat.*, p. 149.

and East Prussia after the Seven Years War ; of the same disease in 1806, and again in 1807 and 8, in Berlin after the heavy losses by the Prussians,<sup>1</sup> and numerous reports by army surgeons, corroborate this assertion, even when they ascribe<sup>2</sup> such malignity, on what I consider imaginary evidence, to climate. With the return to better quarters and food, to more quiet of body and mind, comes a diminution of the evil, and possibly some such change was one reason why the morbus gallicus was supposed to have "abated of its Fierceness," after the ill-starred attempt of the French on Naples. Be this as it may, we may feel pretty sure that primary sores, much worse than the Black Lion or Swan Alley Chancre, did not prevail to any great extent in their army, or the soldiers would have dropped out of their ranks by tens and twenties at a time.

One piece of evidence on this head deserves special notice. It is that about primary syphilis as it appeared in his own person, given by Gruenbeck or Gruenpeck, for the editor of the latest edition, that I have seen, of his first production, with a sublime contempt for orthography, spells the name at one time with a p and another with a b, who gravely relates<sup>3</sup> that his penis, in a brief space of time, say half an hour, swelled to such a size that he could scarcely clasp it with both hands, and that a thousand fistulous passages formed in the swelling, which for nearly four months poured out a continual stream of filthy ichor. He also gives a description of the complaint in its secondary stage, as he saw it, which I place here in juxta-position, that the reader may be enabled to form his own opinion about the value of evidence so often quoted. Gruenbeck says that some of the victims of this disease had, on the forehead, neck, breast, &c., crusts much harder than the bark of a tree ; in some every bone was laid bare ; while others displayed such a multitude of warts and pustules that they could not be counted with anything like accuracy, and others again passed forty, sixty and even a hundred days without sleeping. No wonder that his friends fled from him "as if the naked

<sup>1</sup> Simon ; *Op. citat.*, p. 48.

<sup>2</sup> *Medico Chirurgical Transactions* ; Vol. 4, p. 1.

<sup>3</sup> Libellus de Mentulagra. Quoted in the Excerpta by Hensler, whose reading of the author's name I have adopted.



swords of their enemies hung over their necks," when they heard that he had been attacked by such a malady; no wonder that those attacked by it could "neither stand, walk nor do any kind of human labour."

This "venerable man" as he is called, though some passages in his life are calculated to make us suspicious about his claim to such a character, ought to have lived a little later and accompanied Baron Munchausen as travelling secretary; for unless we excuse him on the ground of insanity, we must convict him of gross exaggeration. The human penis does not swell to such a size from any such cause, and no medical author of that time noticed swellings of this magnitude and suddenness. There is not space on the generative organs for a thousand ulcers. No man ever had crusts on him harder than the bark of a tree, and equally no man ever passed the tenth part of a hundred days without sleeping. But even if the narrative had been a good deal more in accord with common experience, I should, conformably with the law of argument adopted when speaking of Fracastori and von Hutten, still object to it as authority on any disputed point in pathology, on the ground that Gruenbeck was not a medical man,<sup>1</sup> but an excitable lay mortal, or rather a secretary subsequently turned priest, more than half crazed by his fears, and not improbably a little touched upon astrological questions and the intentions of the Deity;<sup>2</sup> whose remarks about physicians and surgeons, and indeed whose whole story, would lead one to think that he had never seriously attempted to master the subject he was so desirous to enlighten the world about, namely the proper treatment of syphilis, which the medical men of that day understood quite as well as he did. However his testimony is useful in a way he little thought of, for when we lop off the exuberances of fancy, and get at something like the naked truth, we find that the periods of incubation in his case were much the same as in the present day.

Allowing that the primary symptoms had improved at the time Hutten speaks of, they must subsequently have undergone a

<sup>1</sup> Hensler; *Geschichte der Lustseuche*; S. 18.

<sup>2</sup> "præcipue quia divinitus ordinatum est, quod soli rustici et barbari hunc morbum curare possunt."

bad relapse, for Rosenbaum gravely asserts,<sup>1</sup> that towards the close of the sixteenth century a spanish army surgeon amputated the penis five thousand times within three months for this complaint ! There exist no means of knowing whether any person ever believed this monstrous statement ; Simon, however, from whom I borrow the story, gives it without farther comment than that five hundred would have been enough, so that it has passed muster, and may serve as a specimen of the way in which some men write about the history of syphilis. I should have put it down as a fable passing all bounds, for common sense at once assures us that in the most despotic country in the world, the patients would, in self-defence, have destroyed such a dangerous madman as this surgeon. Assuming however that about a hundredth part of the tale is true, the case still does not look like one of improvement.

*Possible Complications of Syphilis in 1495, 6 and 7.*—Mention has already been made, that glanders not at all improbably played some slight and brief part in the opening scenes of syphilis, and it is by no means impossible that in some instances, the boils spoken of by von Hutten and Fracastori may really have been furunculi, such as have often appeared after epidemics. The cholera of 1849, it will be remembered, was followed for some years by an eruption of this kind, the boils sometimes looking like a string of sloughs, and at others very closely resembling impetigo rodens, from which it was not at all easy, without the history of the case, to distinguish them.

We are told by Alexander Benedict that, in some instances of the morbus gallicus occurring about this time, the hands and feet of the sufferer dropped off. But for one solitary piece of evidence I should have said that this, supposing it really happened, could not have been the work of syphilis, and was more likely to have resulted from gangrenous erysipelas, a disease which appears to have committed fearful ravages of this kind in the good old times. In a quotation by Pereira<sup>2</sup> from the works of Sigebert we learn that in 1089, which the old chronicler calls "a pestilent year," this malady, possibly due as has been thought to the use of

<sup>1</sup> Oppenheim's *Zeitschrift* ; B. xiv, S. 471. Quoted in *Ricord's Lehre*, S. 72.

<sup>2</sup> *Elements of Materia Medica* ; Part 2, 1840, p. 595.

spurred rye, prevailed extensively, and that the victims of it either perished miserably, or, deprived of their putrid hands and feet, were reserved for a more miserable life ;" while in an account given nearly seven hundred years later by Dr. Wollaston of Bury, of apparently the same disease in a modified shape, we are informed that the limbs of several persons attacked by the complaint rotted off. The confirming evidence just referred to is that of Swediaur, who says<sup>1</sup> that the same thing happened, though to a limited extent, when syphilis spread so widely in Canada during the last century, one little boy having lost both feet by the complaint, and the leg having dropped off at the knee in another.

M. Després considers that the often quoted passage in Marcellus Cumanus, about what he saw on arriving at the camp at Novara, should be referred to itch. The account given by Cumanus is that he found several cavaliers and men-at-arms suffering from pustules on the face and all over the body, which began like millet seeds under and outside the prepuce. These pustules "due to an ebullition of humours," and what I suppose we must translate as "heavenly influences," *ex uno influxu cælesti*, sometimes appeared without pain but accompanied by itching. Then the patients scratched themselves and ulceration took place, as in the eating formica. Some days later the patients were tormented with pains in the arms, thighs and feet, accompanied by great pustules. Marcellus cured the disease by means of bleeding from the saphena, sometimes from the basilica ; digestives, purgatives and finally frictions in the necessary places. When not treated the pustules sometimes lasted a year or more, making the patients look as if they had leprosy or small-pox ! Simon thinks the pustules on the penis were small chancres beginning as miliary vesicles, a view strongly in accord with that of the first author on syphilis, Conrad Schellig, who describes the disease as beginning like a millet seed. But for my part I am quite at a loss to make out how the lineaments of any known disease are to be recognized in such a confused description. Pains in the limbs are not an accompaniment of itch, nor does this disease ever make people look as if they had the leprosy ; true miliary chancres are rare, whereas the affection seen by Cumanus seems to have been quite

<sup>1</sup> *Op. citat.*, p. 175.

common, and I need scarcely say that bad syphilis was never yet cured by such means as he speaks of, unless the frictions were mercurial and played the chief part. My decision therefore would be to dismiss the whole account as far too imperfect to admit of our placing reliance on it, and indeed the observations were only written on the margin of a copy of Argelata's Surgery.

*Farther Decline in Severity.*—The reasons for doubting an improvement in the character of syphilis soon after its outbreak having already been given, it only remains, in connexion with this part of the subject to notice a farther progress of the kind, which has been anticipated, or perhaps we might call the mental process by which it was evolved, semi-predicted. Mr. Lee ascribes the opinion spoken of to Swediaur, who, he says,<sup>1</sup> was satisfied not only that syphilis had grown milder after some time, but that this amelioration had progressed till there was a possibility of the disease subsiding, in happier ages, into a mere local affection. Mr. Lee does not give the part of the work from which he quotes, but he is known to be extremely careful. In the only edition of Swediaur<sup>2</sup> which I have consulted about this part of the matter, the direct opposite is stated. "I have," he says, "seen the disease in a number of instances as virulent and inveterate as ever described by any writer of the sixteenth and seventeenth century." He thought, however, that the complaint was not seen so often, and he was disposed to attribute this to the treatment being so much improved, though it might also be due to the poison having grown milder. But if Swediaur did not hold to the opinion first expressed, many others did so, in particular Astruc, who thought it was dying out in his time, or to use his own words<sup>3</sup> saw "probable Grounds to hope, now daily approaches towards its Declension."

Swediaur is, I believe, at any rate held responsible for the statement often urged in support of the theory about the former severity of syphilis, that when this disease has appeared in a new country, it has always been in a malignant form, the violence of which lessened with time; his share in the opinion however seems to be founded on the history of the outburst of syphilis around

<sup>1</sup> *Syphilitic and Vacino Syphilitic Inoculation*, p. 153.

<sup>2</sup> The third; 1788.

<sup>3</sup> *Op. citat.*, Preface, p. vii.



the Bay of St. Paul. Now it may seem wrong to attack what has become almost one of the pillars of syphilitic pathology, to question a saying which has circulated peaceably through two or three generations of authors ; but Swediaur does not prove any malignity beyond what is common to neglected syphilis, and he stands convicted of far too serious errors to allow of our receiving his word unsupported by much better facts than he adduces. He professes to have drawn his materials from the narrative of a Mr. Bowman, who investigated this disease on the spot ; he also mentions that government, in consequence of the humane representations of Governor Hamilton, sent out six surgeons to treat, and provide with medicine, gratuitously, every person suffering from this new disorder. But when Dr. Adams inquired he was told that no one of the name of Bowman had ever been there in any such capacity ; that there never had been any such person as Governor Hamilton, though Swediaur expressly speaks of him by that name,<sup>1</sup> nor could any minute or entry be found of medical men being sent out. The real names seem to have been M. Beaumont, of whom I find no farther mention, and Governor Haldiman ; an author, therefore, who was so lax on one head, might not have taken due pains with respect to another, and this is the reason why I expressed myself guardedly about believing the number of people said by him to be affected with the new disease.

*Diminution in the Number of hard Sores.*—The next ramification of the belief, that syphilis has abated in virulence, is the oft repeated story about our so rarely seeing the true hunterian chancre now-a-days, a belief of which Richard Carmichael seems to have been the author.<sup>2</sup> The opinion may have some seeming foundation ; there may be here and there a temporary change ; but as to giving this the validity of a law, as to representing the sore to be continually declining in numbers, which I suppose is what some later writers mean, I see nothing to support and something which confutes it. Neither Hunter nor any author of his day goes into the statistics of the question ; consequently there is no safe starting point to date from in comparing his time with Carmichael's. If the latter relied solely on his own experience, the fact shows how soon an occasional circumstance is mistaken

<sup>1</sup> *Op. citat.*, p. 176.

<sup>2</sup> *Op. citat.*, p. 60, 337.

for the operation of a law, and how easily a man of great abilities is borne away by a hurried judgement ; for a decline, so rapid as to make itself felt between 1786 and 1819, would ere this have ended in the almost total extinction of hard sore in Dublin, which is not the case.

Such a reason would, I submit, justify us in rejecting Carmichael's doctrine, but it may be as well for form's sake to go a little into statistics. Hunter then speaks<sup>1</sup> of syphilis occurring in the proportion of one case to four or five of gonorrhœa. From a number of cases noted by myself, I computed that simple sore is rather more prevalent than gonorrhœa. Now if we take the only figures which I know of issued near the time of Carmichael, namely those of Sir George Ballingall, we find, guessing as well as we can, that the proportion of syphilis to gonorrhœa was then most likely even a little higher, as he gives<sup>2</sup> the numbers in the Mediterranean fleet for 1835 at 595 of syphilis to 234 of gonorrhœa, and for 1836 at 710 to 282. Allowing that many of these cases were re-entries, instances of constitutional disease and so on, we must also deduct something in this way from the gonorrhœa cases. M. Rollet, a quarter of a century later, states<sup>3</sup> that a scrutiny of above two thousand cases gave about five-twelfths gonorrhœa, four-twelfths simple, and three-twelfths infecting, sore ; so that I fancy we should scarcely err in assuming that seven cases of primary sore represent Hunter's four or five of gonorrhœa. This would show, as well as such rough calculations can be supposed to show anything, an average of one hunterian chancre to eight sores of all kinds.

An analysis of more recent information leads us to think that this proportion of hard sore is at least maintained in our day. Dr. Jeffery Marston gives<sup>4</sup> the proportion of soft sores to hard as four to one. Mr. Peter Comrie puts down<sup>5</sup> the number of infecting sores, which ought to be somewhat in excess of the true hunterian, as one to four or five of soft sore, though he says there is sometimes a run of the former. Mr. Sloggett noted in the

<sup>1</sup> *Treatise on the Venereal Disease* ; 1786, p. 217.

<sup>2</sup> *Outlines of Military Surgery* ; 1855, p. 506.

<sup>3</sup> *Recherches sur la Syphilis* ; 1861, p. 29.

<sup>4</sup> *Report of the Committee on Venereal Disease*, p. 21.      <sup>5</sup> *Ibid.*, p. 89.

Edgar<sup>1</sup> a hundred and sixty-seven cases of soft chancre and sixty-seven of hard. Dr. Robert Beith gives<sup>2</sup> the relative frequency of hard sore to soft as one to three. Dr. John Morgan gives<sup>3</sup> the admissions in Dublin, for three months, at twenty-one hard sores and eighty-eight soft, and those from the Curragh camp for the same time at seven hard and thirty-four soft. In private practice he thinks<sup>4</sup> the hard sore is somewhat in the ascendant, a point on which I agree with him. M. Fournier found one case in three to be infecting,<sup>5</sup> and M. Puche, in ten thousand cases of sore, met with nineteen hundred and fifty or almost one-fifth of hard chancre<sup>6</sup> beyond which figures I think I need not go.

Of course it will be said that all hard and infecting sores do not come up to Hunter's type. The objection is no doubt strong, still such sores, discriminated by careful observers, contain inherently a large proportion marked by genuine hardening. Besides, as I understand Hunter, he in no way restricts the primary lesion of syphilis exclusively to the form which he portrays, and it was only natural that he should select the most characteristic variety for his famous description. Weighing all these points then, I think if we draw any inference, it must be that there is not decisive evidence of change at any period since Hunter's time.

*Possible Changes in Syphilis and their Law.*—But is syphilis, in place of undergoing any such mutations, widening and tightening its grasp on the human frame, and is this part of some great general change? There are good reasons for asking both questions. Venereal iritis seems to have been non-existent in the days of Hunter and Pearson; according to Lawrence<sup>7</sup> it was unknown to German oculists till Schmidt described it, and Mr. Judd says<sup>8</sup> he does not remember to have seen it when he began his medical studies. M. Chaballier maintains<sup>9</sup> that the disease of the eye, mentioned by De Vigo and rendered by his old translator "ophthalmia," was nothing more or less than iritis, a view strongly combated by Fournier,<sup>10</sup> the fact being that the point may with

<sup>1</sup> *Report of the Committee on Venereal Disease*, p. 130.

<sup>2</sup> *Ibid.*, p. 142.

<sup>3</sup> *Op. cital.*, p. 17.

<sup>4</sup> *Ibid.*, p. 24.

<sup>5</sup> *De la Contagion Syphilitique*; 1860, p. 109.

<sup>6</sup> *Ibid.*

<sup>7</sup> *A Treatise on the Venereal Diseases of the Eye*; 1830, p. 3.

<sup>8</sup> *Op. cital.*, p. 478.

<sup>9</sup> *Op. cital.*, p. 85.

<sup>10</sup> *Jean de Vigo*, p. 96.

equal probability be decided either way. But about the absence of iritis in the days of Hunter and Pearson I think there can be no doubt. These two great surgeons were justly famed for their powers of observation; the one had a large pathological experience of the disease; the other had perhaps the largest practice of his day in venereal complaints. To me it seems inexplicable that such an affection, especially if it were as common in their day as it is now, could have escaped the notice of the most inattentive, and for a still stronger reason that of men of such keen perception as the authors just named. One might think that the altered appearance of the eye would court detection, and even if the medical men overlooked so striking an affection, how came it that the patients never complained of the pain, discomfort and interference with vision as they do now? There is hardly anything a man dreads so much as the danger of becoming blind, and the encroachments of iritis are enough to alarm the most apathetic. In short, while I can understand that such an affection as syphilitic ulceration of the eyelid, the discovery of which is claimed by Lawrence,<sup>1</sup> may have passed unheeded, I admit my inability to believe that iritis ever did so.

For very similar reasons I feel driven to conclude that syphilitic fungus of the testicle is a new arrival. The rapidity with which almost the whole and in some cases the entire gland herniates through the opening, and the singular and to the patient alarming appearance which it presents, conspire to make an impression on the least reflecting mind. It appears to me impossible that such an affection could have existed without strongly attracting notice, yet it seems certain that, though pointed out I think by Carmichael,<sup>2</sup> it was practically unknown till Rollet described it.<sup>3</sup> The constantly increasing number of contributions to the syphilitic pathology of the nervous system does not come to our assistance here, as we cannot decide how much of the increase is due merely to improved modes of investigation.

As concerns the question how far this is part of some great general change I must deal with it briefly, and I fear very imperfectly, as I have only space for a few scattered hints. It would be

<sup>1</sup> *Op. citat.*, p. 308.

<sup>2</sup> *Op. citat.*, p. 241, 3.

<sup>3</sup> *Op. citat.*, p. xxi.



easy to get up a formidable array of testimony, but as just stated, my limits compel me to narrow the evidence to a very few points, and those chiefly connected with a disease often supposed by authors to have supplanted syphilis, namely leprosy, and an affection which has been considered, on no very satisfactory grounds, to be in some way connected with leprosy, that is to say, lepra.

Of these the first is the mysterious disappearance of leprosy itself. Respecting this it will be unnecessary to offer any proofs, and indeed I start with the theory that the reader is fully acquainted with the history of this part of the question. Neither will it be pertinent to the question to state when and where its decadence began. Suffice it to say that leprosy is gone, and that not one of the reasons, as yet assigned for its decline, will bear the test of critical examination. Unless, as I pointed out some years ago, we fall back upon the supposition that this disappearance is due to those unknown springs of action, possibly great climatic and terrestrial changes, which have swept off so many successive races of men and animals, there is no conceivable cause to account for the phenomenon. The next point is the equally mysterious disappearance of lepra for a time and its return with the present century. That this disease existed in far off ages scarcely admits of a doubt, several of the authors who describe leprosy speak of its symptoms in terms which could not well apply to any other complaint. From the time however when leprosy quitted the stage, lepra seems also to have vanished, and to the best of my knowledge it is not spoken of in clear and definite terms by any writer of the seventeenth century. Beckett seems clearly to have recognized it, mistaking it however for leprosy, and Hensler's wonderful industry yielded him a stray case or two culled from the writings of Mead, Brisbane, Fischer and Vogt;<sup>1</sup> a treasure trove which seems to have quite gladdened the heart of the fine old scholar, for he speaks of traces of lepra being found in Europe, as he might do if a hitherto unknown race of men had been discovered. But a physician so near our day as Heberden never treated a case and Cullen never saw one;<sup>2</sup> statements cal-

<sup>1</sup> *Vom abendlaendischen Aussatze*; S. 342.

<sup>2</sup> Bateman; *Op. citat.*, p. 28.

culated to astonish those who know, that in the present day lepra absorbs quite five and a-half per cent. of all cases of cutaneous disease. Lastly we find Adams pointing out<sup>1</sup> the distinction between this disease and elephantiasis Græcorum with a persistence, which, of itself, goes far to show how little was then known of lepra, so common in our day.

*Syphilis not derived from or transmuted into any other Disease.*—Simon states,<sup>2</sup> as if it were a fact established beyond dispute, that in many parts syphilis, itself the offspring of leprosy, has degenerated into a variety of the latter disease. The reader is, I presume, quite aware that some of the older writers believed in such a transformation; others, Paracelsus among the number, thought the morbus gallicus was a cross between the early and local venereal disease, cambucca, and leprosy, an opinion not very actively assailed by M. Ricord when alluding to it,<sup>3</sup> or even by a more critical author in matters of history, Simon; and Dr. Mason Good describes<sup>4</sup> a form of leprosy, the Rose of Asturia, which might be mistaken in some of its features for syphilis, while Hensler, treading apparently in the very steps of Paracelsus, says<sup>5</sup> that leprosy has become blended with other diseases. Thus we see that the idea of fusion, first, I believe, put forward by the daring but highly-gifted swiss innovator in the above shape, and when he maintained that serpigo is a mule begotten by crossing leprosy with syphilis, has survived its eccentric founder by more than three centuries, and has not gone entirely out of fashion now. As I am not aware that these opinions have anywhere been critically examined, I purpose to end this paper by briefly summing up the evidence for and against the probabilities of a change, which seems to me in its way of as much magnitude, and as difficult to realize in conception, as a transmutation of species. Besides leprosy, there are some other diseases into which syphilis is said to have degenerated, and it will therefore perhaps be most convenient to take them altogether.

*Leprosy.*—An analysis of the report on leprosy, issued by the Royal College of Physicians, disposes of the view that there is

<sup>1</sup> *Op. citat.*, p. 278.

<sup>2</sup> *Op. citat.*, p. 5.

<sup>3</sup> *Op. citat.*, p. 162.

<sup>4</sup> *Op. citat.*, Vol. 3, p. 43.

<sup>5</sup> *Vom abendlaendischen Aussatze*; S. 2.

any fundamental connexion between this disease and syphilis. Whatever affinity, whatever similarity there may be, there is assuredly no tie between them in the way of descent; nothing to show that leprosy ever gives birth to syphilis or any other disease, or that syphilis ever degenerates into it. The two diseases may run their course in the same individual; a patient suffering from leprosy may contract either local or constitutional syphilis,<sup>1</sup> and be cured of either or both without the leprosy being affected. Leprosy is as nearly incurable as a disease, to be curable at all, can well be. No system of treatment can be relied on to influence it in the slightest degree; syphilis can often be cured and almost always relieved, while in contra-distinction to leprosy it is rarely fatal. An infant is scarcely ever born with leprosy; still-births from syphilis are common enough. The whole list of diseases therefore, given by Simon<sup>2</sup> as having undergone this suspicious degeneration, may be struck out. The phenomena, when analyzed, resolve themselves into leprosy or syphilis, or both; the former disease perhaps dying out, the latter having possibly undergone much the same change as in sibbens. Of such affections the history usually is that they have become localized in some out of the way place, among people far removed from their only chance of help, the aid of surgery, and that these people, judging only from what they could see and feel, have given the malady some local name, describing its most prominent symptom. I purpose closing this paper with a few brief illustrations of the above statements.

*Scherlievo* or *Skerljevo* is one of the diseases thus long mistaken. The symptoms are aching pains, hoarseness, difficulty of swallowing, inflammation and unhealthy ulceration of the velum, fauces, uvula, and tonsils, the ulcers being covered with yellow lardaceous secretion. Having passed through this stage the disease subsides, and on its reappearance attacks either the osseous structures or the skin. Squamous, moist and ulcerative eruptions, and copper-

<sup>1</sup> Danielssen. Quoted by Lee; *Syphilitic and Vaccino-Syphilitic Inoculation*, p. 50.

<sup>2</sup> "Das Pellagra, die Sibbens, die Yaws, die Pians, die canadische Seuche, die krimmische Krankheit, das mal rouge de Cayenne, die norwedische Radsyge, die holsteinische Krankheit, die asturische Rose u. s. w. sind mehr oder weniger bocsartige Formen der in Aussatz ausgearteten Lustseuche."

coloured spots about the size of lentils, accompany these symptoms. The eye, nose and cheek are sometimes destroyed by ulceration. "Growths on the lips," tubercles, condylomata, nodes and fungoid ulcers, ozæna, contractions of the limbs, and "fungus of the joints" are mentioned among the symptoms. The disease is highly contagious, being communicated by contact. We find the hideous crusts from pustules, described by one or two of the earliest writers on syphilis, reappearing on the outbreak of this disease in Illyria and Dalmatia at the beginning of the present century.<sup>1</sup> Després suggests<sup>2</sup> that this disease is modified by scrofula, an opinion I cannot share. The addition of the strumous element seems to me purely gratuitous, and I see nothing in the description beyond what belongs to neglected syphilis, although it has been asserted that scherlievo is nothing more than leprosy, and in the absence of observations made on the spot, a certain degree of doubt may impend over some of the histories. Communication by contact, however, is certainly not a symptom of leprosy.

*Sibbens*, or *Sivvens*, is another. This disease, which seems to have been first systematically noticed rather more than a century ago in Dumfriesshire, is reputed to have been introduced thither from the Highlands, where it had long been known under the name now universally given to it. In a pamphlet<sup>3</sup> now very scarce, for a knowledge of which I am indebted to the courtesy of the late Dr. Blacklock of Dumfries, it is stated that the disease began with a sore throat or an inflammation of the uvula, "pap of the hawse" being the quaint old term given to it. The tonsils were often superficially ulcerated, and frequently white specks and sloughs appeared on the roof of the mouth and insides of the cheeks and lips. A very small excrescence, or "fleshy sprouting like a rasp," often sprang up at the "corners of the mouth," and was considered a pretty sure sign of the disease. Sometimes there was hoarseness and the uvula was destroyed. Children at the breast affected with this complaint "perished for hunger," not being able to suck. In some instances the submaxillary glands were swollen.

<sup>1</sup> Haeser ; *Op. citat.*, Vol. 2, p. 293.

<sup>2</sup> *Op. citat.*, p. 333.

<sup>3</sup> *An Account of a Very Infectious Distemper* ; 1769. No Name. Almost certainly by Dr. Ebenezer Gilchrist.



In a more developed stage the disease showed itself in the shape of small pustules, or "blushes of a dirty hue," which broke, left a dry crust "with blueness around," and ulcerated deep into the underlying cellular tissue or fat. This symptom was chiefly seen in children. The pustules mostly occupied the belly, groins and sides. They were sluggish, not large, often nearly round in shape, and with a clean, slightly inflamed edge. Occasionally they ran together, sometimes to such an extent that "all the fatty membrane of the belly below the navel" was laid into one huge ulcer, which emitted such an "intolerable and peculiar stench, that those in this condition might be said to be rotten before they were dead," reminding us of the stories told about some of the earliest victims of syphilis. In some children the whole scalp fell into "a mortified state, the ears ready to drop off." Smaller, very sluggish ulcers, which "always remained in a dead state, without pain or inflammation," were likewise observed.

In a still more malignant state it seems to have been accompanied by an outbreak of impetigo rodens, for we are told that now boils of a "high florid colour, without any matter to defend them," formed "in different parts, in the arms, shoulders, face, legs and feet," where they degenerated into ulcers, penetrating to the muscles and leaving them bare. They were so excessively tender that they would not support the mildest application, and the lips of the openings so formed were hard and ragged. In some rare cases the disease affected the bones, but never "with us" the large and more solid ones. Benjamin Bell however, commenting upon this statement, says<sup>1</sup> that he had seen several instances where both the bones of the arms and legs had been attacked, and that it was "by no means uncommon to find this disease fix upon the bones of the head." Several persons lost their teeth, with the sockets, and parts of the osseous structures of the cheeks and nose gave way in others. When the skin was alone or principally affected, copper-coloured mottling was the predominant sign. Children seem to have suffered from erythema on the lower part of the belly, buttocks, thighs, and parts of the legs, occasionally taking on the ring form which has been noticed by some observers. Broad red patches, as large as the palm of

<sup>1</sup> *Treatise on Gonorrhœa Virulenta*; 1793, Vol. 2, p. 444.

the hand, were seen in somewhat older subjects, scattered over the trunks and limbs, and accompanied by inflammation. Or clusters of pustules (Qy papules) came out, followed by dryness and peeling of the skin, which was left tender underneath. Scabby eruptions were often seen on the scalp, forehead, insides of the thighs and groins; also small indurated papulæ which occasioned great itching. Inflammation, soreness and excrescences about the anus were frequent. Serpiginous ulcerations (eating tetter) also prevailed, and syphilitic ecthyma, accompanied by great heat and swelling. The resemblance of this to variola, as in the cases I have already alluded to,<sup>1</sup> is expressly stated in the old pamphlet. "One had them," it says<sup>2</sup> speaking of the tubercles, "spread thick over the whole body with matter as in the confluent small-pox, and died when the swelling began to subside." Papulo-squamous eruption (syphilitic lepra) and sluggish tubercles running into each other are clearly described. The disease was intensely contagious.

I suppose few will now contest the opinion that this disease was really syphilis communicated purely in the secondary form, and that the view taken of it by Gilchrist more than a century ago, namely that it was venereal, is the correct one. The picture drawn of sибbens by Benjamin Bell, a quarter of a century later than Gilchrist, is simply that of venereal disease, and has been pronounced by an accomplished french writer to be, allowing for the absence of all mention of chancre, a magnificent description of syphilis. Bell himself never entertained a doubt that it was of this nature, and Mr. Wills, speaking of the disease, of which he gives a very good account, as it appeared in his day in Ayrshire, Galloway and Dumfries, says<sup>3</sup> it began with a condyloma or tubercle, and not, as most writers would have it, with a pustule. The disease was a frequent cause of abortion, although according to Bell<sup>4</sup>, "in some instances children are born with it at the full time and in a few it breaks out in the course of the first month after delivery." The disease was cured with mercury, and not unfrequently required a full course of it. Sarsaparilla, decoc-

<sup>1</sup> Page 52.

<sup>2</sup> Page 10.

<sup>3</sup> *London and Edinburgh Monthly Journal*; 1844, Vol. 4, p. 283.

<sup>4</sup> *Op. citat.*, Vol. 2, p. 446.

tion of the woods and burdock were useful, particularly in the "higher degrees of the distemper," and later experience showed the value of iodide of potassium in this stage. The prevailing impression was, as has often been reported of syphilis, that a person, who had once contracted the disease, never caught it again.

Yet men well able to judge have doubted whether this disease was syphilis. Dr. Adams, who went to Scotland on purpose to have a look at such a mysterious complaint, describes an affection which we can scarcely recognize in the pages of Bell and Gilchrist. He found wasting rather than ulceration of the tonsils, loss of the uvula, ulceration of the velum, glueing together of these parts by viscid mucus, and pustular eruption, all preceded by fever; "pustular appearances," cicatrices, scabs &c. The disease scarcely ever appeared as a primary affection of the genitals. He concluded that sибbens is a separate disease from syphilis, and his opinion has been shared by Hunter, Mathias<sup>1</sup>, and Mason Good<sup>2</sup>; while Swediaur thought<sup>3</sup> it was a cross between "the itch and the lues," and then referred it "under the syphilis."<sup>4</sup> Even Mr. Wills, who seems to have so carefully studied the complaint, arrives at a decision little calculated to satisfy the exacting demands of modern criticism; for he pronounces<sup>5</sup> sибbens to be quite distinct from true venereal but identical with venereal condyloma. Dr. Adams even went so far as to recognize<sup>6</sup> in sибbens, not the venereal disease of his day but that of a time anterior to 1494, a view which, after a careful examination of the authorities he quotes, I feel myself unable to confirm.

The fact then that these men—Swediaur, who was in the way of getting at the truth; Adams, who was on the spot and so ably assisted in his inquiries by the leading medical practitioners of the neighbourhood; and Mr. Wills, who took so much pains with his subject, should all have been mistaken, shows how easily such an error might have happened in the infancy of syphilis when every man had to be his own teacher. If more than two hundred and fifty years after the dependence of secondary disease upon chancre,

<sup>1</sup> *The Mercurial Disease*; 1816, p. xi.

<sup>2</sup> *Op. citat.*, p. 12.

<sup>3</sup> *Op. citat.*, p. 286.

<sup>4</sup> *Op. citat.*, Vol. 3, p. 417, 419.

<sup>5</sup> *Ibid.*, p. 236.

<sup>6</sup> *Op. citat.*, p. 190.

and the distinctly contagious nature of the former, had been laid open to the eyes of all thinking men, we find some of those who saw sibbens in its nestling place, so to speak, unable to satisfy themselves as to what it really was, and evidently disbelieving the infectious nature of secondary syphilis, we can easily understand that such oversights were possible enough on the part of those who saw the very first stray cases of this disease ; and that the absence of an authentic account of the importation of syphilis into a district is something widely different from proof, that the disease itself did not exist in that part of the world prior to the mention of it in history. That syphilis was really carried to Dumfriesshire from the Highlands seems fully established, and that it had infested the north-west of Scotland quite a century before the first account of it was given to the world, equally so ; but as to how it got into the Highlands, we have nothing beyond a tradition, which may be quite correct, but which is, as we might expect, entirely unsupported by authentic testimony. Consequently I see, in this fact alone, a certain degree of evidence, that the conjecture thrown out respecting the possibility of syphilis having lurked in Europe, for some time before its great outbreak, is anything but improbable.

I think the discrepancy between the opinions taken up by Adams and Wills and those held by Gilchrist and Bell admits of easy explanation. Syphilis thus communicated often runs a much milder course than ordinary venereal disease. This was peculiarly so with one of the patients seen by Adams<sup>1</sup>, a young woman whose case he watched with great care and who recovered in a few days under mercury ; a fact the casual occurrence of which is vouched for in Dr. Gilchrist's pamphlet, though evidently enough by no means the rule, for it is stated that for the most part the distemper returned, perhaps in a worse form, and was then only to be eradicated by a regular course of medicine like that recommended in venereal cases ; that is to say mercury, for the employment of which he gives singularly judicious and succinct directions. Mr. Wills also observes that the secondary manifestations of sibbens are mild, and so far as his observations went, with one exception, wholly confined to the skin, he having in a practice of

<sup>1</sup> *Op. citat.*, p. 184.



twenty-seven years seen nothing of destruction of the bones ; adding, however, that though mercury internally and caustic to the condylomata generally cure quickly enough, the disease often returns and demands a sharper and more prolonged treatment. Still more misleading was the absence of chancre and the regularity with which, after an incubation of about a month, the disease broke out in the throat, tonsils and mouth.

So far all is intelligible enough, but we now come upon a source of mystery and error, which seems to be difficult enough to deal with, and this is the presence on the scene of the yaw fungus, the very thing from which sibbens takes its name. This symptom was a "spongy substance" which sprouted up "much like a rasp or a strawberry, elevated one half above the surface, and, when fully formed," appearing "as if set in a socket cut exactly in the flesh to receive it." Dr. Gilchrist further describes the fungus as springing up in a patch of pityriasis, "an itchy tetter or ringworm" of a round form, which, either spontaneously or from scratching, gradually came to discharge an ichorous humour. The tetter itself was sometimes crusted over with a black scab, except at the edges where a crack or ring formed, "like the line of separation between a mortified and a sound part." By degrees this crack enlarged, the scab was "pushed off" and was succeeded by the fungus. At other times the tetter was represented by "a dark or grey scarf resembling some kind of leprosy." The fungus seems to have arisen most frequently on the tetter which did not become crusted at all, and is characterized as being indolent rather than tender. According to another observer the surface of the fungus was covered with a secretion like toasted cheese. Of the descriptions by Hill, Trotter and Freer I am unable to give any account, as their writings have either perished, or so entirely disappeared from circulation, that I have not met with them anywhere.

Dr. Adams tells us<sup>1</sup> that this fungus was not insisted upon as a necessary symptom of sibbens by some of the best practitioners whom he consulted. The reason is not far to seek ; they had never seen it. Dr. Gilchrist, in the pamphlet, expressly says<sup>2</sup> that it had never been observed in Dumfries, nor is there anything in

<sup>1</sup> *Op. citat.*, p. 193.

<sup>2</sup> Page 11.

Bell's description showing that he ever saw it. Neither do I find better proof of personal observation in the writings of Hibbert and Wills. A symptom so prominent as this could not have been overlooked, and as it is not the nature of syphilis to appear, under two different shapes, in places so near as the Highlands and Dumfries, I am forced to conclude, either that yaws, to which this fungus pretty clearly belongs, existed in the Highlands, or that Gilchrist and others drew their materials from oral accounts, confused by passing from one person to another.

Each of these conclusions seems equally difficult to sustain. An occasional case of yaws may have been carried from a tropical climate to the Highlands, but all the evidence, which I have been able to collect, is opposed to the view that such a disease would maintain itself and be propagated there. Dr. Hibbert indeed contends<sup>1</sup> that it could and did; that yaws was only sибbens intensified and masked by the dirt, stench, wretched food and utter want of ventilation then prevalent in the Highlands and western islands of Scotland, and in no way different from the tropical disease, the characteristic features of which are simply the product of misery. This view was, in reference to identity, long previously opposed by Dr. Gilchrist, and later on evidence will be brought forward to show that he was most probably right. It was however again upheld after his time in a "Medical Sketch of Dumfriesshire," by Mr. Gibson, one of the surgeons to the Dumfries Dispensary; and Dr. McCulloch's opinion is that sибbens is neither more nor less than frambæsia, and that it was brought into Dumfriesshire by a company of soldiers from the West Indies who were quartered in that town. The reader will see, in the section on yaws, that this opinion is contested by a gentleman now residing in a part where yaws is very frequently seen, and the statement of Gilchrist about the entire absence of yaw fungus in his neighbourhood is yet to be explained. It may however be, that frambæsia degenerates in a cold or temperate climate, and that both it and syphilis were separately introduced into both the Highlands and Dumfries.

That any syphilitic growth ever really assumes the form and look of a raspberry or strawberry, or is ever covered with a

<sup>1</sup> *Edinburgh Journal of Medical Science*; 1826, Vol. 1, p. 309.

secretion like toasted cheese, I must beg leave to doubt. I have seen a good deal of neglected syphilis, but nothing which could, except by a strange abuse of language, be so described. Some years ago I had under me a lad from Barking, evidently of rather obtuse intellect, and suffering from secondary disease which had been left to take care of itself. He had, on the right side of the scalp and forehead, two condylomata of such enormous size, that I tried, in vain however, to induce him to let me have a drawing made of them. In their way they were by far the most revolting and preternatural things I ever saw, each of them being at least six times as large as a good sized condyloma; but as to comparing them even in the loosest way to the formation and appearance of the rasp- or strawberry, the simile would have been very far fetched; and the secretion, with which great part of their upper surface was overlaid, reminded me of what I should think dirty, thin, white kid leather would be when boiled to a pulp. Perhaps the less imaginative language employed by Carmichael in describing button scurvy, which seems to be the same disease as sibbens, may offer a clue to the solution of some part of the mystery, for he speaks<sup>1</sup> of the secretion as being a "white tenacious matter," and of the spots as "exhibiting an appearance somewhat like the surface of a raspberry." Mr. Wills says<sup>2</sup> it was essentially the condylomata in the groins which, after the delicate cuticle had peeled off, took on "somewhat the look of a raspberry in miniature," which may have been strictly correct, but does not quite explain what Dr. Gilchrist says when describing the fungus, any more than it does why the common people in Dumfriesshire and Galloway used to call sibbens by the name of yaws,<sup>3</sup> a thing they would hardly have done, unless there had been either occasionally a stray case of yaws itself, or else one of sibbens more strongly resembling it than is described as having been seen by any of the writers I have quoted.

*Yaws* is the last of these affections for which I can find space, and I suppose any one who described the pathology of it as being in a state of well-nigh hopeless confusion would not be far wrong. It will, I trust, not be held requisite, that all the evidence in proof

<sup>1</sup> *Op. citat.*, p. 16.

<sup>2</sup> *Op. citat.*, p. 284.

<sup>3</sup> B. Bell; *Op. citat.*, Vol. 2, p. 437.

of this should be cited, but a few specimens, showing the wide discrepancy of opinion, not only as to the nature but even as to the symptoms and course of the disease, are indispensable ; those selected are taken almost entirely from the writings of the later authors who had themselves seen and studied frambæsia in its native haunts.

According, then, to Dr. Adams, who had an unusually good chance of watching the progress of a case, the disease begins with intermittent fever ; after the "remission" of this a universal eruption of pustules takes place, with sore throat, and small ulcers on glans penis. In the case which he narrates fifty-six of the largest pustules, some of them not less than two to three inches in diameter, had ulcerated at the end of a month, when the sore throat still continued and the fever was as violent as ever. In addition to the large pustules there were numerous smaller ones. The scabs which formed on the pustules were horny, and on removing them a fungus shot up. The disease appeared to die out by a process of exhaustion as in smallpox, the whole constitution being affected at one time and gradually throwing off the incubus. Mercury seemed to exert little control over the affection. Adams confirms the statement of Ludford, that the mother yaw, a large tubercle in which the severity of the disease seems to culminate, always leaves a scar. I suppose this means that the others were not followed by citatrices, as would certainly have happened had the case been one of syphilitic ecthyma, to which otherwise, and excepting also the fungus, it bears a strong resemblance. Adams, however, and Hunter looked upon yaws as a distinct affection, as did Swediaur<sup>1</sup> and Mathias ; facts to be remembered to their credit, when we consider how authoritatively it has been stated that yaws is only neglected syphilis, an opinion in which I quite admit having shared up to the time when Dr. Gavin Milroy's report appeared, and which is still in so far shared by Kaposi, that he maintains<sup>2</sup> the idea of yaws being a disease sui generis must be given up, as must equally the opinion that it is always syphilis, he having shown that the growths, which distinguish it, are also found in non-syphilitic, inflammatory, and neo-plastic processes.

<sup>1</sup> *Op. citat.*, p. 239.

<sup>2</sup> *Die Syphilis der Haut* ; 1875, S. 155.



Dr. James Thomson, who had seen the disease in Jamaica, describes it again very differently from Adams. According to his account, which I take from Dr. Hibbert, not having been able to find the original where he gives it, the disease is frequently ushered in by feverish symptoms, and the whole skin appears as if dusted with flour. The readers of Hensler will recognize this symptom as indicative of leprosy, while, according to Wendt,<sup>1</sup> who however does not impress one very highly as to his learning or discrimination, it constituted an element in the morbus gallicus. After the lapse of a few days, small papulæ appear on the forehead and other parts of the body, continuing to increase till a crust forms on the top, under which ill-conditioned pus is found. A pustule, thus covered with a scab, will often increase to the size of a shilling, concealing a foul sloughy ulcer, which usually heals, though sometimes a fungus springs up in it.

Dr. Pedrelli is somewhat inclined to believe<sup>2</sup> that there are two kinds of yaws, but he does not speak positively. One kind is confined to a particular locality, principally the torrid zone, among the natives of which it is found; it is of a virulent nature and due to causes not yet ascertained. The other is not restricted to any particular race or region, and is possibly of syphilitic origin. Dr. Pedrelli has, perhaps, with some slight reservation, come nearer the mark than any other writer; for while there can be little doubt that misunderstood syphilis, communicated by secondary affections, and identical with sibbens, has sometimes been mistaken for yaws, there is equally little that, as expressly stated by some of the respondents in Dr. Gavin Milroy's report, a distinct endemic affection of that name exists, "a specific disease in no way allied to syphilis or leprosy,"<sup>3</sup> which will be described farther on. The reservation just made is based on the two following points. It does not really appear that sibbens is found in the tropical regions where true yaws is endemic, or that the latter is more virulent and obstinate than neglected syphilis. Some of the

<sup>1</sup> Hufeland's *Journal der practischen Arzneykunde*; B. LV, S. 4.

<sup>2</sup> *Bulletino delle Science Medicales*; Ottob., 1871. Quoted by Dr. Purdon; *Cutaneous Medicine*; 1875, p. 260.

<sup>3</sup> *Report on Leprosy and Yaws in the West Indies*, p. 57.

cases at any rate are mild enough. Dr. George Turner, who saw the disease in Samoa, found<sup>1</sup> that mercury had a great control over the severity of yaws, a few doses causing the pustules to shrivel up and disappear, a statement which recalls what has been often said of sibbens itself, and Dr. Turner's account is quite substantiated by some of the replies in the official report on yaws. The distinctive feature here is that sibbens, under which is comprized everything in the shape of the syphilitic form of yaws, sometimes manifests a very intractable disposition, and may under certain circumstances develop into ordinary syphilis, which, as well as I can judge, is far more formidable than yaws proper is described to be.

According then to what is said in the report, the latter disease is inoculable, and when the virus is inserted, the sore "may heal up without any appreciable change before any constitutional symptoms arise," or it may turn into a "roundish ulcer," "with everted edges and depressed centre." The latent stage, that of incubation, lasts "about four to six weeks, after which there is an attack of feverishness, with pains about the joints and shafts of the long bones." After this follows a roseola or pityriasis, as also constitutional irritation accompanied by "severe aching pains in the bones and joints." Then "come small, flat spots, or blotches of a brownish or dark-red coloured efflorescence." On these form tubercles, covered with cuticle and of a light yellow or copper colour. Out of or on these tubercles the yaw proper arises, a round or "dark convex" growth very like "a raspberry, strawberry or mulberry." There may be ulcers on the feet or legs, "nodes and swellings of the joints" and diffuse inflammation of skin of palms of hands and soles of feet, followed by escape of sero-purulent fluid, giving the part "a riddled or sieve-like look."

The disease spreads by contact, never to all appearance springing up spontaneously, though one observer tells a different tale, basing his judgement however seemingly on only two cases, one of which is suspicious, the patient having had syphilis. Mercury assists "in the dispersion of yaws" and iodide of potassium is useful especially when the bone pains are bad. One of the medical men speaks of mercury as the sheet-anchor, and

<sup>1</sup> *Glasgow Medical Journal*; New Series, Vol. 2, p. 509.

praises black wash. "The general impression is that, after one attack of yaws, the person becomes insusceptible to the contagion of the disease," a position contested by another observer. Dr. Milroy enumerates the symptoms in a case of long standing as "numerous scabby spots over the trunk and extremities of the size of small or largish limpets, and covered with dry yellow crusts, the removal of which exposed a raw surface sometimes bleeding a little and having a red granulated or slightly fungoid appearance, but with little if any purulent discharge on this surface." Another patient, seen by him, had large superficial ulcerations on the front of the ankle and dorsum of the foot, and so on. The "scabby spots," the size of limpets, covered with crusts, recall to mind the accounts given of the malmorto and first cases of syphilis.

According to the foregoing descriptions, the disease is not a bad imitation of syphilis communicated by contact, and we might really feel inclined to adopt the belief that yaws is syphilis in the African, its salient features somewhat blurred and even effaced by such modifying influences as neglect and difference of constitution. But now let us hear the account given by another medical authority, whose narrative differs widely from that of some of the respondents; it is that of Dr. John Imray<sup>1</sup> and is to the following effect.

He says the ordinary yaw excrescence does not resemble a strawberry at all. It is "not unlike a piece of coarse cotton wick, a quarter of an inch, more or less, in diameter, and stuck on the skin in a dirty brownish setting, and projecting to a greater or less extent." These growths generally appear on the face, neck, extremities, parts of generation, perinæum, hips and arms, much less frequently on trunk and hairy scalp. May form on nostrils or on eyebrows, becoming then pendulous; also about mouth or anus, constituting almost a ring round the opening. They leave in the negro marks darker than the skin, but in a person with a mixture of white blood these are whiter than the natural hue. "It is rare indeed that the throat, palate or nasal bones become affected." There is usually "very little if any constitutional disturbance, either during the period of incubation or on the accession of the

<sup>1</sup> *Report*; p. 12.

eruption." If one member of a family contract the disease, all then susceptible of the infection take it. Yaws, he considers, is communicated only by contact, and a period of seven to ten weeks elapses between the inoculation of the virus and the breaking out of the eruption. The affection is almost exclusively confined to the blacks, but cases do occur among the whites. With care it can almost always be cured.

The only forms of constitutional syphilis, he contends, which resemble yaws, are tubercles and condylomata ; but the tubercles of syphilis are solid and deep seated, while those of yaws possess neither of these characters ; farther, the latter are not prone to ulcerate, and they begin as small yellow spots, which gradually grow more prominent till the cuticle gives way and a spongy mass appears. Even when they assume the appearance of condylomata, as on the anus, the characteristic yaw fungus will be found on other parts of the body. He has never heard of a case which followed a primary sore (chancre). Calomel or corrosive sublimate in decoction of the woods, with great attention to cleanliness, seems an effectual remedy, a feature in which this disease, or variety of disease, again shows a resemblance to sibbens, and contrasts strongly with the rebellious nature of true syphilis communicated by chancre.

Towards the close of this description, unsurpassed for completeness and lucidity, Dr. Imray sums up adversely to the supposition that yaws is identical with sibbens. The reasons are that the latter begins with ulcerations on the tonsils and uvula, and aphthous ulcerations on the inside of the mouth and cheeks, while frambæsia never commences in this way. Dr. Milroy pronounces no opinion on the question of identity. Taking, then, Dr. Imray's account as strictly correct, we must conclude that Adams, Mathias and those other authors who considered yaws to be a distinct affection, were right ; that there is, properly speaking, only one disease of that name ; that *yaws, though not venereal, is a syphilis*, having more analogy with that disease than any other ; and that, after Dr. Milroy's researches, to call any form of secondary disease yaws, means not pointing out a variety of disease but committing a mistake, which, prior to the publication of the report, still seems to me, so far as I can judge, difficult to



avoidance. Dr. Hibbert sees in the syphilis of the close of the fifteenth century nothing but yaws, the product of misery engendered by the long devastating wars and breaking up of the feudal system &c. He would have come nearer the mark had he found it in the description of the deed evyll (malmorto) by John de Vigo, with its pustules raised above the level of the skin, and their colour that of a mulberry half ripe. As it is, I do not understand how he arrives at such a conclusion, for there is not, in any one of the authors whom he quotes, a single passage which could stand for a picture of the yaw fungus.

*Diseases resolved into Syphilis and Leprosy.*—Several other diseases of a similar nature are mentioned by authors, the pians, the mal de Cayenne, the Rose of Asturia &c. I have already given a list of these, so that it will not be necessary to go through this part of the matter again. The early history of them is obscure, and even the most recent accounts are not very clear. Some are leprosy, but as in the case of the asturian Rose described by Dr. Mason Good, with features so modified as to suggest a suspicion that those who first described the disease did so more from hearsay than actual observation, or were biassed by what they had read in the older writers, and that the narrative had not improved in accuracy by passing from hand to hand. In certain cases, *e.g.* the asturian Rose itself, there is really good reason to think that a non specific, obstinate, misunderstood and neglected erythema was mistaken for leprosy and constituted the disease; in others we find secondary syphilis mixed up in the description with a separate disease, as in the canadian “mal rouge de la Baye de Saint Paul,” which seems to have included lupus exedens.<sup>1</sup>

Some again are dying out. The late Dr. Blacklock of Dumfries was kind enough to inform me that in a practice of forty-one years he had never met with a case answering the description given by Dr. Gilchrist; and Dr. Borthwick, also of Dumfries, wrote to me that he had never seen the disease in the virulent form described by Dr. Gilchrist and others. Dr. Gilchrist, however, of the Crichton Institute, to whom I am indebted for some most valuable information tells me, that though Dr. McCulloch,

<sup>1</sup> Swediaur; *Op. citat.*, p. 172.

the oldest practitioner in Dumfries, has not seen a case of sibbens for years, yet that Dr. Murray of that town has at present (May 31, '79) a case under his care. The decline of sibbens in Dumfries seems however to have been quite a recent affair. Dr. Gilchrist has been so obliging as to send me the entries of cases of this disease treated in the Infirmary of that town from 1789 to 1823, both inclusive, or a period of thirty-five years. The numbers exhibit singular fluctuations, but nothing like a falling off in the supply. Thus while the years 1802 and from 1804 to 9 display a blank, and 1798 and 1801 only yield one case each, the number in 1789, eight, was nearly quadrupled in 1794, and after being several times at such figures as twelve and fifteen, closed in 1823 at nineteen. Four years after we find Mr. Gibson speaking of the disease as if it were rare. "Frambæsia or yaws," he says, "is occasionally met with, but seems to be becoming less frequent. Regarding sibbens my correspondents have mostly been silent." Allowing a good deal for increase of population, and the greater facilities afforded to those suffering under these diseases for having their cases attended to, there is yet something to be explained about this long persistence and sudden disappearance of sibbens. Again as to yaws. Dr. Daniel, the african traveller, told me that in a residence of sixteen years on the west coast of Africa, where this disease was once supposed to be so common, he had not seen more than six or seven cases of it, and these he had not examined sufficiently to satisfy himself as to the real nature of the disease, and surgeons have informed me that yaws is now rarely seen in the West Indies. This statement is confirmed in the report of the Royal College of Physicians on leprosy<sup>1</sup> as regards Jamaica, and in Dr. Gavin Milroy's report<sup>2</sup> as regards some portions of these colonies, Barbadoes and Antigua for instance, but rather confuted as to others, among them the country districts of Jamaica, where whole colonies of Africans are said to be "relapsing into all the barbarisms of their native condition,"<sup>3</sup> and Dominica.

Dim, however, as is the light shed upon these strange complaints, it yet reveals one thing; no transition between syphilis and leprosy or any other disease, no hybrid affection which could

<sup>1</sup> Page 10.

<sup>2</sup> Page 72, 51.

<sup>3</sup> Ibid., p. 62.

be referred to any possible conjunction of them, has yet been found. As the nebula of one age is resolved by the higher telescopic powers of the next into stars and space, so does the confused picture here, when the beam of critical investigation, gathering strength of light with increase of ages, is turned upon it, settle down into the two forms of disease just named, their natures, even in the long lapse of years, as unchanged as those of the elements. When we come face to face with the symptoms, we find that the phantom maladies described by Simon and others have no real existence; they die out and the twin giants, syphilis and leprosy, reign in their stead.

*Transmutation of Syphilis into Cancer.*—But wherever we turn some wonderful transmutation of syphilis meets us, and we might almost say of faith in such points as Pallas-Athena says of her beloved Ulysses, that it “is not yet dead upon earth.” What is more, it seems bent upon dying hard, and if beaten from its former strongholds, a creed like this can easily, and indeed does take shelter in the refuge which cancer and scrofula offer, there being however this consolation for its pursuers, that if followed up it may be hunted out again with equal success. For there is no proof, pathological or histological, that any such change ever takes place. The theories about the transmutation of syphilis, and the facts on which they are built up, the fabric and the foundation, prove, when scrutinized, alike intangible. Cancer may spring up on a site previously or actually syphilitic, just as it may in a tissue injured by a blow; deterioration of tissue may excite increased activity in a cancerous disposition of the part; but as to such an absolute and radical change as is implied by transmutation taking place spontaneously, I must, on the evidence before me, class it as mere conjecture. Dr. Bradley clearly leans to the belief that syphilis may be transformed into cancer and struma, having met with an encephaloid tumour which sprang from a typical syphilitic patch on the retina,<sup>1</sup> and his views are I believe shared by men of great experience, but I cannot find out that they are in any degree proven. Again, while I have just admitted that the deterioration of tissue caused by syphilis may evoke cancer, I know of no single fact which really shows that it

<sup>1</sup> *Medical Press and Circular*; 1877, Vol. 2, p. 81.

has ever done so, though I have heard the doctrine maintained by an able surgeon. In deciding such a point identity of site must be left out of the question. Epithelioma has been known to spring up in the middle of a patch of lupus, and fungus hæmatodes in a mole, but this is something widely different from the change of one disease into another.

Equally little foundation do I see for the theory that epithelioma may be engendered by previous syphilis. M. Després, who has remarked nothing confirmatory of M. Ricord's doctrine that syphilis leads to cancer, has twice observed epithelioma "on the glans and uterine neck" in persons who had confirmed syphilis. Nothing more probable when we reflect that one disease is common, and the other not so very rare; but when we also reflect that epithelioma assails thousands who never had syphilis, and syphilis tens of thousands who never have epithelioma, it becomes very likely that such cases as these mentioned by Després are mere coincidences, the syphilis being an accident happening to persons who would under any circumstances have suffered from epithelioma, provided only that they lived long enough to give it a chance of showing itself. Kaposi's view<sup>1</sup> that syphilis acts here as a general not a special factor, is the only one to which a judgement, unbiassed by preconceived views, can conduct us; and admitting that it operates at all, I must contend that its range is very limited, for did such changes occur frequently, I must almost certainly have now and then lighted upon something of the kind in the large number of cases of syphilis in all stages which I have seen.

*Into Scrofula.*—I suppose there is no one who has read medicine at all, and yet has not read that syphilis, after it has percolated through the tertiary stage, may reappear in the children as scrofula. That it may be an occasional factor in the genesis of this disease, that it may act generally as an exhausting agent in the parent, an indulgent critic will perhaps class among the possibilities of syphilitic pathology, but I know of nothing which attests the probability of such a surmise; as regards the specific action of syphilis in producing scrofula I feel strongly disposed to contest it altogether. In 9,973 cases of all kinds of skin disease

<sup>1</sup> *Op. citat.*, p. 187.



in my department at St. John's Hospital I found 76 cases of scrofulo-derma. In almost every instance I inquired carefully into the antecedents of the parents, the fathers especially, without being able to find evidence of pre-existence of venereal disease in a single instance. One author has asserted that struma is always the offspring of syphilis. This means in plain English to brand thousands of fathers, men of irreproachable life, with a stigma of the worst kind ; and as struma prevailed for ages in districts to which syphilis had never found access, I think we should commit no crime in assuming that the author of this statement, unsupported by any facts even in his own pages, was as far wrong as he could well be. The same doctrine was at one time upheld by some practitioners about lepra and with about the same amount of foundation. Indeed, by what process of reasoning those, who believe that syphilis only appeared towards the close of the fifteenth century, can regard it as a specific cause of lepra, a disease described hundreds of years before with sufficient accuracy to admit of its identification, and of struma, which certainly seems to have existed long previously, is an enigma, the solution of which I must leave to those more versed in deciphering such secrets than myself.

Whether such opinions as these really gain currency, whether they really exert any practical influence over the great business of medicine, that is to say the treatment of disease, or whether they are merely regarded in the same light as any peculiarity in the spelling or punctuation of the author might be, is a question about which works on medicine never enlighten us, seeing that, with one or two rare exceptions, no allusion is made to the opinions of any preceding author on the subject. A statement, calculated to affect the very basis of syphilitic pathology, linked with the innermost histologic evolution of this disease, is, without a breath of fact in its favour, received by successive generations of readers, each one of whom has been taught in his time that medicine is a science. This let-alone fashion of dealing with the question has, however, at any rate, one merit which cannot always be claimed for medicine. It is tolerant in the highest degree ; each succeeding announcement of this kind is received with the same impartial silence, and an observer, accustomed to the strictness of exact

research, might here repose from the fatigue of examining facts and luxuriate in the contemplation of a branch of knowledge where matters are made so easy, that a theory is received without evidence and without opposition. Hensler contends that every man should be at full liberty to put forth his own hypothesis about the origin and nature of syphilis ; he speaks of it as a privilege which we have no more business to contest than we have to refuse him the right to call his house his own, or to sit under the shadow of his own fig-tree. We have gone beyond Hensler ; for we extend this latitude not only to theories about syphilis, but, as the reader has just seen, to those about the derivatives of this disease. But whether such tolerance has been for good or for evil, *whether in fact what is called science can afford to be tolerant*, is quite another question. For it is to be remembered that we are dealing here, not with popular errors such as the astronomer and chemist can afford to overlook, but with tenets calculated, if erroneous, to carry the seeds of decay into the innermost recesses of syphilitic pathology.

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